



SEQUENCE LISTING

<110> BEUTLER, BRUCE
POLTORAK, ALEXANDER

<120> LPS - RESPONSE GENE COMPOSITIONS AND METHODS

<130> UTSD:602

<140> 09/396,985

<141> 1999-09-15

<150> 60/102,392

<151> 1998-09-29

<150> 60/100,403

<151> 1998-09-15

<160> 104

<170> PatentIn Ver. 2.1

<210> 1

<211> 4868

<212> DNA

<213> Homo sapiens

<400> 1

3
aaaatactcc cttgcctcaa aaactgctcg gtcaaacggg gatagcaaac cacgcattca 60
cagggccact gctgctcaca aaaccagtga ggatgatgcc aggatgatgt ctgcctcgcg 120
cctggctggg actctgatcc cagccatggc cttcctctcc tgcgtgagac cagaaagctg 180
ggagccctgc gtggagggtg ttcctaatat tacttatcaa tgcattggagc tgaatttcta 240
caaaatcccc gacaacctcc cttctctcaac caagaacctg gacctgagct ttaatccccct 300
gaggcattta ggcagctata gcttcttcag tttcccagaa ctgcaggtgc tggatttatc 360
caggtgtgaa atccagacaa ttgaagatgg ggcataatcag agcctaagcc acctctctac 420
cttaatatgg acaggaaacc ccatccagag tttagccctg ggagcccttt ctggactatc 480
aagtttacag aagctgggtg ctgtggagac aaatctagca tctctagaga acttccccat 540
tggacatctc aaaactttga aagaacttaa tgtggctcac aatcttatcc aatctttcaa 600
attacctgag tatttttcta atctgaccaa tctagagcac ttggaccttt ccagcaacaa 660
gattcaaagt atttattgca cagacttgcg ggttctacat caaatgcccc tactcaatct 720
ctcttttagac ctgtccctga atcctatgaa ctttatccaa ccaggtgcat ttaaagaaat 780
taggcttcat aagctgactt taagaaataa ttttgatagt ttaaagttaa tgaaaacttg 840
tattcaaggt ctggctgggt tagaagtcca tcgtttgggt ctgggagaat ttagaaatga 900
aggaaacttg gaaaagtttg acaaactctg tctagagggc ctgtgcaatt tgaccattga 960
agaattccga ttagcatact tagactacta cctcgatgat attattgact tatttaattg 1020
tttgacaaat gtttcttcat tttccctggg gagtgtgact attgaaaggg taaaagactt 1080
ttcttataat ttccgatggc aacattttaga attagttaac tgtaaatttg gacagtttcc 1140
cacattgaaa ctcaaactct tcaaaaggct tacttttact tccaacaaag gtgggaatgc 1200
tttttcagaa gttgatctac caagccttga gtttctagat ctgagtagaa atggcttgag 1260
tttcaaaggt tgctgttctc aaagtgattt tgggacaacc agcctaaagt atttagatct 1320
gagcttcaat ggtgttatta ccatgagttc aaacttcttg ggcttagaac aactagaaca 1380
tctggatttc cagcattcca atttgaaaca aatgagtgag ttttcagtat tcctatcact 1440
cagaaacctc atttacctg acatttctca tactcacacc agagttgctt tcaatggcat 1500
cttcaatggc ttgtccagtc tcgaagtctt gaaaatggct ggcaattctt tccaggaaaa 1560

cttccttcca	gatatcttca	cagagctgag	aaacttgacc	ttcctggacc	tctctcagtg	1620
tcaactggag	cagttgtctc	caacagcatt	taactcactc	tccagtcttc	aggtactaaa	1680
tatgagccac	aacaacttct	tttcattgga	tacgtttcct	tataagtgtc	tgaactccct	1740
ccaggttctt	gattacagtc	tcaatcacat	aatgacttcc	aaaaaacagg	aactacagca	1800
ttttccaagt	agtctagctt	tcttaaactc	tactcagaat	gactttgctt	gtacttgtga	1860
acaccagagt	ttcctgcaat	ggatcaagga	ccagaggcag	ctcttggtgg	aagttgaacg	1920
aatggaatgt	gcaacacctt	cagataagca	gggcatgcct	gtgctgagtt	tgaatatcac	1980
ctgtcagatg	aataagacca	tcattggtgt	gtcggtcctc	agtgtgcttg	tagtatctgt	2040
tgtagcagtt	ctggctctata	agttctatct	tcacctgatg	cttcttgctg	gctgcataaa	2100
gtatggtaga	gggtgaaaaca	tctatgatgc	ctttgttatc	tactcaagcc	aggatgagga	2160
ctgggtaagg	aatgagctag	taaagaatct	agaagaaggg	gtgcctccat	ttcagctctg	2220
ccttcactac	agagacttta	ttcccgggtg	ggccattgct	gccaacatca	tccatgaagg	2280
tttccataaa	agccgaaagg	tgattgttgt	ggtgtcccag	cacttcatcc	agagccgctg	2340
gtgtatcttt	gaatatgaga	ttgctcagac	ctggcagttt	ctgagcagtc	gtgctggtat	2400
catcttcatt	gtcctgcaga	aggtggagaa	gaccctgctc	aggcagcagg	tgagctgta	2460
ccgccttctc	agcaggaaca	cttacctgga	gtgggaggac	agtgtcctgg	ggcggcacat	2520
cttctggaga	cgactcagaa	aagccctgct	ggatggtaaa	tcattggaatc	cagaaggaac	2580
agtgggtaca	ggatgcaatt	ggcaggaagc	aacatctatc	tgaagaggaa	aaataaaaac	2640
ctcctgaggc	atcttctgcc	cagctgggtc	caacacttgt	tcagttaata	agtattaaat	2700
gctgccacat	gtcaggcctt	atgctaaggg	tgagtaattc	catggtgcac	tagatatgca	2760
gggctgctaa	tctcaaggag	cttccagtgc	agaggggaata	aatgctagac	taaaatacag	2820
agtcttccag	gtgggcattt	caaccaactc	agtcaaggaa	cccatgacaa	agaaagtcac	2880
ttcaactctt	acctcatcaa	gttgaataaa	gacagagaaa	acagaaaagag	acattgttct	2940
tttctgagtc	cttttgaatg	gaaattgtat	tatgttatag	ccatcataaa	accatttttg	3000
tagttttgac	tgaactgggt	gttcactttt	tcctttttga	ttgaatacaa	tttaaattct	3060
acttgatgac	tgcatgctc	aaggggctcc	tgatgcaaga	tgccccttcc	attttaagtc	3120
tgtctcctta	cagatgttaa	agtctagtgg	ctaattccta	aggaaacctg	attaacacat	3180
gctcacaaac	atcctgggtc	ttctcgagca	tgttctatct	tttaactaat	caccctgat	3240
atatttttat	ttttatatat	ccagttttca	tttttttacg	tcttgccctat	aagctaatat	3300
cataaataag	gttgttttaag	acgtgcttca	aatatccata	ttaaccacta	tttttcaagg	3360
aagtatggaa	aagtacactc	tgtcactttg	tcactcgatg	tcattccaaa	gttattgcct	3420
actaagtaat	gactgtcatg	aaagcagcat	tgaataaatt	tgtttaagg	gggcactctt	3480
ttaaacggga	agaaaatttc	cgcttcctgg	tcttatcatg	gacaatttgg	gctagaggca	3540
ggaaggaagt	gggatgacct	caggaggtca	ccttttcttg	attccagaaa	catatgggct	3600
gataaacccg	gggtgacctc	atgaaatgag	ttgcagcaga	agtttatatt	tttcagaaca	3660
agtgatgttt	gatggacctc	tgaatctctt	tagggagaca	cagatggctg	ggatccctcc	3720
cctgtaccct	tctcactgcc	aggagaacta	cgtgtgaagg	tattcaaggc	agggagtata	3780
cattgctgtt	tctgtttggg	caatgctcct	tgaccacatt	ttgggaagag	tgatgtttat	3840
cattgagaaa	acaatgtgtc	tggaattaat	ggggttctta	taaagaaggt	ttccagaaaa	3900
gaatgttcat	tccagcttct	tcaggaaaca	ggaacattca	aggaaaagga	caatcaggat	3960
gtcatcaggg	aaatgaaaat	aaaaaccaca	atgagatatc	accttatacc	aggtagatgg	4020
ctactataaa	aaaatgaagt	gtcatcaagg	atatagagaa	attggaacct	ttcttctactg	4080
ctggagggaa	tggaatgtgg	tgtagccgtt	atgaaaaaca	gtacggaggt	ttctcaaaaa	4140
ttaaaaatag	aactgctata	tgatccagca	atctcacttc	tgtatatata	cccaaaaataa	4200
ttgaaatcag	aatttcaaga	aaatatttac	actcccatgt	tcattgtggc	actcttcaca	4260
atcactgttt	caaagttat	ggaaacaacc	caaatttcca	ttggaaaata	aatggacaaa	4320
ggaaatgtgc	atataacgta	caatggggat	attattcagc	ctaaaaaaaag	gggggatcct	4380
gttattttatg	acaacatgaa	taaaccggga	ggccattatg	ctatgtaaaa	tgagcaagta	4440
acagaaagac	aaatactgcc	tgatttcatt	tatatgaggt	tctaaaatag	tcaaactcat	4500
agaagcagag	aatagaacag	tggttcctag	ggaaaaggag	gaagggagaa	atgaggaaat	4560
agggagttgt	ctaattggta	taaaattata	gtatgcaaga	tgaattagct	ctaaagatca	4620
gctgtatagc	agagttcgta	taatgaacaa	tactgtatta	tgactttaac	attttgttaa	4680
gagggtaacct	ctcatgttaa	gtgttcttac	catatacata	tacacaagga	agcttttggga	4740
ggtgatggat	atattttatta	ccttgattgt	ggtgatgggt	tgacaggtat	gtgactatgt	4800
ctaaactcat	caaattgtat	acattaaata	tatgcagttt	tataatatca	aaaaaaaaaa	4860

aaaaaaaa

4868

<210> 2
<211> 839
<212> PRT
<213> Homo sapiens

<400> 2
Met Met Ser Ala Ser Arg Leu Ala Gly Thr Leu Ile Pro Ala Met Ala
1 5 10 15
Phe Leu Ser Cys Val Arg Pro Glu Ser Trp Glu Pro Cys Val Glu Val
20 25 30
Val Pro Asn Ile Thr Tyr Gln Cys Met Glu Leu Asn Phe Tyr Lys Ile
35 40 45
Pro Asp Asn Leu Pro Phe Ser Thr Lys Asn Leu Asp Leu Ser Phe Asn
50 55 60
Pro Leu Arg His Leu Gly Ser Tyr Ser Phe Phe Ser Phe Pro Glu Leu
65 70 75 80
Gln Val Leu Asp Leu Ser Arg Cys Glu Ile Gln Thr Ile Glu Asp Gly
85 90 95
Ala Tyr Gln Ser Leu Ser His Leu Ser Thr Leu Ile Leu Thr Gly Asn
100 105 110
Pro Ile Gln Ser Leu Ala Leu Gly Ala Phe Ser Gly Leu Ser Ser Leu
115 120 125
Gln Lys Leu Val Ala Val Glu Thr Asn Leu Ala Ser Leu Glu Asn Phe
130 135 140
Pro Ile Gly His Leu Lys Thr Leu Lys Glu Leu Asn Val Ala His Asn
145 150 155 160
Leu Ile Gln Ser Phe Lys Leu Pro Glu Tyr Phe Ser Asn Leu Thr Asn
165 170 175
Leu Glu His Leu Asp Leu Ser Ser Asn Lys Ile Gln Ser Ile Tyr Cys
180 185 190
Thr Asp Leu Arg Val Leu His Gln Met Pro Leu Leu Asn Leu Ser Leu
195 200 205
Asp Leu Ser Leu Asn Pro Met Asn Phe Ile Gln Pro Gly Ala Phe Lys
210 215 220
Glu Ile Arg Leu His Lys Leu Thr Leu Arg Asn Asn Phe Asp Ser Leu
225 230 235 240
Asn Val Met Lys Thr Cys Ile Gln Gly Leu Ala Gly Leu Glu Val His

245					250					255					
Arg	Leu	Val	Leu	Gly	Glu	Phe	Arg	Asn	Glu	Gly	Asn	Leu	Glu	Lys	Phe
			260					265					270		
Asp	Lys	Ser	Ala	Leu	Glu	Gly	Leu	Cys	Asn	Leu	Thr	Ile	Glu	Glu	Phe
		275					280					285			
Arg	Leu	Ala	Tyr	Leu	Asp	Tyr	Tyr	Leu	Asp	Asp	Ile	Ile	Asp	Leu	Phe
		290					295					300			
Asn	Cys	Leu	Thr	Asn	Val	Ser	Ser	Phe	Ser	Leu	Val	Ser	Val	Thr	Ile
305							310					315			320
Glu	Arg	Val	Lys	Asp	Phe	Ser	Tyr	Asn	Phe	Gly	Trp	Gln	His	Leu	Glu
				325					330					335	
Leu	Val	Asn	Cys	Lys	Phe	Gly	Gln	Phe	Pro	Thr	Leu	Lys	Leu	Lys	Ser
			340					345					350		
Leu	Lys	Arg	Leu	Thr	Phe	Thr	Ser	Asn	Lys	Gly	Gly	Asn	Ala	Phe	Ser
		355					360					365			
Glu	Val	Asp	Leu	Pro	Ser	Leu	Glu	Phe	Leu	Asp	Leu	Ser	Arg	Asn	Gly
		370					375					380			
Leu	Ser	Phe	Lys	Gly	Cys	Cys	Ser	Gln	Ser	Asp	Phe	Gly	Thr	Thr	Ser
385							390					395			400
Leu	Lys	Tyr	Leu	Asp	Leu	Ser	Phe	Asn	Gly	Val	Ile	Thr	Met	Ser	Ser
			405						410					415	
Asn	Phe	Leu	Gly	Leu	Glu	Gln	Leu	Glu	His	Leu	Asp	Phe	Gln	His	Ser
			420					425					430		
Asn	Leu	Lys	Gln	Met	Ser	Glu	Phe	Ser	Val	Phe	Leu	Ser	Leu	Arg	Asn
		435					440					445			
Leu	Ile	Tyr	Leu	Asp	Ile	Ser	His	Thr	His	Thr	Arg	Val	Ala	Phe	Asn
		450					455					460			
Gly	Ile	Phe	Asn	Gly	Leu	Ser	Ser	Leu	Glu	Val	Leu	Lys	Met	Ala	Gly
465							470					475			480
Asn	Ser	Phe	Gln	Glu	Asn	Phe	Leu	Pro	Asp	Ile	Phe	Thr	Glu	Leu	Arg
			485					490					495		
Asn	Leu	Thr	Phe	Leu	Asp	Leu	Ser	Gln	Cys	Gln	Leu	Glu	Gln	Leu	Ser
			500					505					510		
Pro	Thr	Ala	Phe	Asn	Ser	Leu	Ser	Ser	Leu	Gln	Val	Leu	Asn	Met	Ser
		515					520					525			
His	Asn	Asn	Phe	Phe	Ser	Leu	Asp	Thr	Phe	Pro	Tyr	Lys	Cys	Leu	Asn
		530					535					540			

Ser	Leu	Gln	Val	Leu	Asp	Tyr	Ser	Leu	Asn	His	Ile	Met	Thr	Ser	Lys	545	550	555	560
Lys	Gln	Glu	Leu	Gln	His	Phe	Pro	Ser	Ser	Leu	Ala	Phe	Leu	Asn	Leu	565	570	575	
Thr	Gln	Asn	Asp	Phe	Ala	Cys	Thr	Cys	Glu	His	Gln	Ser	Phe	Leu	Gln	580	585	590	
Trp	Ile	Lys	Asp	Gln	Arg	Gln	Leu	Leu	Val	Glu	Val	Glu	Arg	Met	Glu	595	600	605	
Cys	Ala	Thr	Pro	Ser	Asp	Lys	Gln	Gly	Met	Pro	Val	Leu	Ser	Leu	Asn	610	615	620	
Ile	Thr	Cys	Gln	Met	Asn	Lys	Thr	Ile	Ile	Gly	Val	Ser	Val	Leu	Ser	625	630	635	640
Val	Leu	Val	Val	Ser	Val	Val	Ala	Val	Leu	Val	Tyr	Lys	Phe	Tyr	Phe	645	650	655	
His	Leu	Met	Leu	Leu	Ala	Gly	Cys	Ile	Lys	Tyr	Gly	Arg	Gly	Glu	Asn	660	665	670	
Ile	Tyr	Asp	Ala	Phe	Val	Ile	Tyr	Ser	Ser	Gln	Asp	Glu	Asp	Trp	Val	675	680	685	
Arg	Asn	Glu	Leu	Val	Lys	Asn	Leu	Glu	Glu	Gly	Val	Pro	Pro	Phe	Gln	690	695	700	
Leu	Cys	Leu	His	Tyr	Arg	Asp	Phe	Ile	Pro	Gly	Val	Ala	Ile	Ala	Ala	705	710	715	720
Asn	Ile	Ile	His	Glu	Gly	Phe	His	Lys	Ser	Arg	Lys	Val	Ile	Val	Val	725	730	735	
Val	Ser	Gln	His	Phe	Ile	Gln	Ser	Arg	Trp	Cys	Ile	Phe	Glu	Tyr	Glu	740	745	750	
Ile	Ala	Gln	Thr	Trp	Gln	Phe	Leu	Ser	Ser	Arg	Ala	Gly	Ile	Ile	Phe	755	760	765	
Ile	Val	Leu	Gln	Lys	Val	Glu	Lys	Thr	Leu	Leu	Arg	Gln	Gln	Val	Glu	770	775	780	
Leu	Tyr	Arg	Leu	Leu	Ser	Arg	Asn	Thr	Tyr	Leu	Glu	Trp	Glu	Asp	Ser	785	790	795	800
Val	Leu	Gly	Arg	His	Ile	Phe	Trp	Arg	Arg	Leu	Arg	Lys	Ala	Leu	Leu	805	810	815	
Asp	Gly	Lys	Ser	Trp	Asn	Pro	Glu	Gly	Thr	Val	Gly	Thr	Gly	Cys	Asn	820	825	830	

Trp Gln Glu Ala Thr Ser Ile
835

<210> 3
<211> 3811
<212> DNA
<213> Homo sapiens

<400> 3
acagggccac tgctgctcac agaagcagtg aggatgatgc caggatgatg tctgcctcgc 60
gcctggctgg gactctgac ccagccatgg ccttcctctc ctgcgtgaga ccagaaagct 120
gggagccctg cgtggagact tggccctaaa ccacacagaa gagctggcat gaaacccaga 180
gctttcagac tccggagcct cagcccttca ccccgattcc attgcttctt gctaaatgct 240
gccgttttat cagggagggt gttcctaata ttacttatca atgcatggag ctgaatttct 300
acaaaatccc cgacaacctc cccttctcaa ccaagaacct ggacctgagc tttaatcccc 360
tgaggcattt aggcagctat agcttcttca gtttcccaga actgcagggt ctggatttat 420
ccagggtgtga aatccagaca attgaagatg gggcatatca gagcctaagc cacctctcta 480
ccttaatatt gacaggaaac cccatccaga gtttagccct gggagccttt tctggactat 540
caagtttaca gaagctgggt gctgtggaga caaatctagc atctctagag aacttcccca 600
ttggacatct caaaactttg aaagaactta atgtggctca caatcttata caatctttca 660
aattacctga gtatttttct aatctgacca atctagagca cttggacctt tccagcaaca 720
agattcaaag tattttattgc acagacttgc gggttctaca tcaaagccc ctactcaatc 780
tctctttaga cctgtccctg aaccctatga actttatcca accagggtgca tttaaagaaa 840
ttaggcttca taagctgact ttaagaaata attttgatag tttaaatgta atgaaaactt 900
gtattcaagg tctggctgggt ttagaagctc atcgtttgggt tctgggagaa tttagaaatg 960
aaggaaaactt ggaaaagtgt gacaaatctg ctctagaggg cctgtgcaat ttgaccattg 1020
aagaattccg attagcatat tttagactact acctcgatga tattattgac ttattttaatt 1080
gtttgacaaa tgtttcttca ttttccctgg tgagtgtgac tattgaaagg gtaaaagact 1140
tttcttataa tttcggatgg caacatttag aattagttaa ctgtaaattt ggacagtttc 1200
ccacattgaa actcaaatct ctcaaaaggc ttactttcac ttccaacaaa ggtgggaatg 1260
ctttttcaga agttgatcta ccaagccttg agtttctaga tctcagtaga aatggcttga 1320
gtttcaaagg ttgctgttct caaagtgatt ttgggacaa cagcctaaag tatttagatc 1380
tgagcttcaa tgggtgttatt accatgagtt caaacttctt gggcttagaa caactagaac 1440
atctggattt ccagcattcc aatttgaaac aaatgagtga gttttcagta ttctatcac 1500
tcagaaacct catttacctt gacatttctc atactcacac cagagttgct ttcaatggca 1560
tcttcaatgg cttgtccagt ctggaagtct tgaaaatggc tggcaattct ttccaggaaa 1620
acttccctcc agatatcttc acagagctga gaaacttgac cttcctggac ctctctcagt 1680
gtcaactgga gcagttgtct ccaacagcat ttaactcact ctccagtctt caggtactaa 1740
atatgagcca caacaacttc ttttcattgg atacgtttcc ttataagtgt ctgaactccc 1800
tccaggttct tgattacagt ctcaatcaca taatgacttc caaaaaacag gaactacagc 1860
attttccaag tagtctagct ttcttaaate ttactcagaa tgactttgct tgtacttgtg 1920
aacaccagag tttcctgcaa tggatcaagg accagaggca gctcttggtg gaagtgaac 1980
gaatggaatg tgcaacacct tcagataagc agggcatgcc tgtgctgagt ttgaatatca 2040
cctgtcagat gaataagacc atcattggtg tgtcggctct cagtgtgctt gtagtatctg 2100
ttgtagcagt tctggtctat aagttctatt ttcacctgat gcttcttgct ggctgcataa 2160
agtatggtag aggtgaaaac atctatgatg cctttgttat ctactcaagc caggatgagg 2220
actgggtaag gaatgagcta gtaaagaatt tagaagaagg ggtgcctcca tttcagctct 2280
gccttacta cagagacttt attcccgtg tggccattgc tgccaacatc atccatgaag 2340
gtttccataa aagccgaaag gtgattgttg tgggtgtccc gcacttcac cagagccgct 2400
gggtgatctt tgaatatgag attgctcaga cctggcagtt tctgagcagt cgtgctggtg 2460
tcattctcat tgtcctgcag aaggtggaga agacctgct caggcagcag gtggagctgt 2520
accgcttct cagcaggaac acttacctgg agtgggagga cagtgtcctg gggcggcaca 2580
tcttctggag acgactcaga aaagccctgc tggatggtaa atcatggaat ccagaaggaa 2640
cagtgggtac aggatgcaat tggcaggaag caacatctat ctgaagagga aaaataaaaa 2700

```

cctcctgagg catttcttgc ccagctgggt ccaacacttg ttcagttaat aagtattaaa 2760
tgctgccaca tgtcaggcct tatgctaagg gtgagtaatt ccatgggtgca ctagatatgc 2820
agggctgcta atctcaagga gcttccagtg cagagggaat aaatgctaga ctaaaatata 2880
gagtcttcca ggtgggcatt tcaaccaact cagtcaagga acccatgaca aagaaagtca 2940
tttcaactct tacctcatca agttgaataa agacagagaa aacagaaaga gacattgttc 3000
ttttcctgag tcttttgaat ggaaattgta ttatgttata gccatcataa aaccattttg 3060
gtagttttga ctgaactggg tgttcacttt ttcctttttg attgaatata atttaaattc 3120
tacttgatga ctgcagtcgt caaggggctc ctgatgcaag atgccccttc cattttaagt 3180
ctgtctcctt acagagggtta aagtctaatt gctaattcct aaggaaacct gattaacaca 3240
tgctcacaac catcctgggtc attctcgaac atgttctatt ttttaactaa tcaccctga 3300
tatattttta tttttatata tccagttttc atttttttac gtcttgcccta taagctaata 3360
tcataaataa ggttggttaa gacgtgcttc aaatatccat attaaccact atttttcaag 3420
gaagtatgga aaagtacact ctgtcacttt gtcactcgat gtcattccaa agttattgcc 3480
tactaagtaa tgactgtcat gaaagcagca ttgaaataat ttgttttaaag ggggcactct 3540
tttaaacggg aagaaaattt ccgcttcctg gtcttatcat ggacaatttg ggctataggc 3600
atgaaggaag tgggattacc tcaggaagtc accttttctt gattccagaa acatatgggc 3660
tgataaaccg ggggtgacct catgaaatga gttgcagcag atgtttattt ttttcagaac 3720
aagtgatgtt tgatggacct atgaatctat ttagggagac acagatggct gggatccctc 3780
ccctgtaccc ttctcactga caggagaact a 3811

```

<210> 4
 <211> 799
 <212> PRT
 <213> Homo sapiens

<400> 4
 Met Glu Leu Asn Phe Tyr Lys Ile Pro Asp Asn Leu Pro Phe Ser Thr
 1 5 10 15
 Lys Asn Leu Asp Leu Ser Phe Asn Pro Leu Arg His Leu Gly Ser Tyr
 20 25 30
 Ser Phe Phe Ser Phe Pro Glu Leu Gln Val Leu Asp Leu Ser Arg Cys
 35 40 45
 Glu Ile Gln Thr Ile Glu Asp Gly Ala Tyr Gln Ser Leu Ser His Leu
 50 55 60
 Ser Thr Leu Ile Leu Thr Gly Asn Pro Ile Gln Ser Leu Ala Leu Gly
 65 70 75 80
 Ala Phe Ser Gly Leu Ser Ser Leu Gln Lys Leu Val Ala Val Glu Thr
 85 90 95
 Asn Leu Ala Ser Leu Glu Asn Phe Pro Ile Gly His Leu Lys Thr Leu
 100 105 110
 Lys Glu Leu Asn Val Ala His Asn Leu Ile Gln Ser Phe Lys Leu Pro
 115 120 125
 Glu Tyr Phe Ser Asn Leu Thr Asn Leu Glu His Leu Asp Leu Ser Ser
 130 135 140
 Asn Lys Ile Gln Ser Ile Tyr Cys Thr Asp Leu Arg Val Leu His Gln

Pro Asp Ile Phe Thr Glu Leu Arg Asn Leu Thr Phe Leu Asp Leu Ser
 450 455 460
 Gln Cys Gln Leu Glu Gln Leu Ser Pro Thr Ala Phe Asn Ser Leu Ser
 465 470 475 480
 Ser Leu Gln Val Leu Asn Met Ser His Asn Asn Phe Phe Ser Leu Asp
 485 490 495
 Thr Phe Pro Tyr Lys Cys Leu Asn Ser Leu Gln Val Leu Asp Tyr Ser
 500 505 510
 Leu Asn His Ile Met Thr Ser Lys Lys Gln Glu Leu Gln His Phe Pro
 515 520 525
 Ser Ser Leu Ala Phe Leu Asn Leu Thr Gln Asn Asp Phe Ala Cys Thr
 530 535 540
 Cys Glu His Gln Ser Phe Leu Gln Trp Ile Lys Asp Gln Arg Gln Leu
 545 550 555 560
 Leu Val Glu Val Glu Arg Met Glu Cys Ala Thr Pro Ser Asp Lys Gln
 565 570 575
 Gly Met Pro Val Leu Ser Leu Asn Ile Thr Cys Gln Met Asn Lys Thr
 580 585 590
 Ile Ile Gly Val Ser Val Leu Ser Val Leu Val Val Ser Val Val Ala
 595 600 605
 Val Leu Val Tyr Lys Phe Tyr Phe His Leu Met Leu Leu Ala Gly Cys
 610 615 620
 Ile Lys Tyr Gly Arg Gly Glu Asn Ile Tyr Asp Ala Phe Val Ile Tyr
 625 630 635 640
 Ser Ser Gln Asp Glu Asp Trp Val Arg Asn Glu Leu Val Lys Asn Leu
 645 650 655
 Glu Glu Gly Val Pro Pro Phe Gln Leu Cys Leu His Tyr Arg Asp Phe
 660 665 670
 Ile Pro Gly Val Ala Ile Ala Ala Asn Ile Ile His Glu Gly Phe His
 675 680 685
 Lys Ser Arg Lys Val Ile Val Val Val Ser Gln His Phe Ile Gln Ser
 690 695 700
 Arg Trp Cys Ile Phe Glu Tyr Glu Ile Ala Gln Thr Trp Gln Phe Leu
 705 710 715 720
 Ser Ser Arg Ala Gly Ile Ile Phe Ile Val Leu Gln Lys Val Glu Lys
 725 730 735

Thr Leu Leu Arg Gln Gln Val Glu Leu Tyr Arg Leu Leu Ser Arg Asn
740 745 750

Thr Tyr Leu Glu Trp Glu Asp Ser Val Leu Gly Arg His Ile Phe Trp
755 760 765

Arg Arg Leu Arg Lys Ala Leu Leu Asp Gly Lys Ser Trp Asn Pro Glu
770 775 780

Gly Thr Val Gly Thr Gly Cys Asn Trp Gln Glu Ala Thr Ser Ile
785 790 795

<210> 5

<211> 3395

<212> DNA

<213> Rattus norvegicus

<400> 5

```

tcgagcggcc gcccgggcag gtttctaact tccctcctga gatgggctta ttaattctag 60
aacaaaacca aaagtgagaa tgctaagggtt ggcactctca ctctcttagcc 120
agtatacctt tgaatacaat atttacagag gggcaaccgc tgggagagaa ggggcagggg 180
ccccagggac tctgccttgc caccatttac agttcgatcat gctttctcac ggctccgct 240
ggttgcagaa aatgccagga tgatgcctct cttgcatctg gctgggactc tgatcatggc 300
attgttcctt tccctgcctga gaccaggaag cttgaatccc tgcatagagg tacttcctaa 360
tattacctac caatgcatgg atcagaatct cagcaaaatc cctcatgaca tcccttattc 420
aaccaagaac ctatagctga gcttcaaccc cctgaagatc ttaagaagct atagcttcac 480
caatttctca caatttcagt ggctggattt atccagggtg gaaattgaga caattgaaga 540
caaggcattg catggcttaa accagctctc aaccttggtg ctgacaggaa accctatcaa 600
gagtttttcc ccaggaggtt tttctggact aacaaattta gagaatctgg tggctgtgga 660
gacaaaaatg acctctctag agggtttcca tattggacag cttatatcct taaagaaact 720
aaatgtggct cataatctta tacattcctt taagttgcct gaatattttt ctaatctgac 780
aaacctagaa catgtggatc tttcttataa ctatattcaa actatttctg tcaaagactt 840
acagtttcta cgtgaaaatc cccaagtcaa tctctcttta gacctgtctt taaacccaat 900
tgactccatt caagcccaag cctttcaggg aattaggctc catgaattga ctctaagaag 960
taattttaat agctcaaatg tactgaaaat gtgccttcaa aacatgactg gtttacatgt 1020
ccatcggttg atcttgggag aatttaaaaa tgaaaggaat ctggaaagtt ttgaccgttc 1080
tgtcatggaa ggactatgca atgtgagcat tgatgagttc aggttaacat atataaatca 1140
tttttcagat gatatttata atctcaattg cttggcaaat atttctgcaa tgtctttcac 1200
aggtgtacat ataaaacaca tagcagatgt tccataggcat ttcaaattggc aatccttatc 1260
aatcattaga tgtcatctta agccttttcc aaagctgagt ctaccttttc ttaaaagtgt 1320
gactttaact accaacagag aggatatcag ctttggtcag ttggctctgc caagtctcag 1380
atatctagat cttagtagaa atgccatgag ctttagaggt tgctgttctt attctgattt 1440
tggaacaaac aacctgaagt acttagacct cagcttcaat ggtgtcatcc tgatgagtgc 1500
caacttcatg ggtctagaag agctggaata cctggacttt cagcactcca ctttaaaaaa 1560
ggtcacagaa ttctcagtgt tcttatctct tgaaaaactt ctttaccttg acatctctta 1620
cactaatacc aaaattgact ttgatggcat atttcttggc ttgatcagtc tcaacacttt 1680
aaaaatggct ggcaattctt tcaaagacaa caccctttca aatgtcttta caaacacaa 1740
aaacttaaca ttcttgatc tttctaaatg ccaactggaa cagatatcta ggggggtatt 1800
tgacacactc tacagactcc agttattaaa catgagtcac aacaacctac tgtttctgga 1860
tccatcccat tataaacagc tgtactccct caggactctt gattgcagtt tcaatcgcat 1920
agagacatcc aaaggaatac tgcaacattt tccaaagagt ctagecgtct tcaatctgac 1980
taataattct gttgcttgta tatgtgaata tcagaatttc ttgcagtggg tcaaggacca 2040
gaaaatgttc ttggtgaatg ttgaacaaat gaaatgtgca tcacctatag acatgaaggc 2100
ctccctggtg ttggatttta cgaattccac ctgttatata tacaagacta tcatcagtgt 2160

```

atcgggtgggc agtgtgcttg tggtagccac tgtagcattt ctgatatacc acttctattt 2220
 tcacctgata cttattgctg gctgtaaaaa gtacagcaga ggagaaagca tctatgatgc 2280
 atttgtgatc tactcgagcc agaattgagga ctgggtgaga aacgagctgg taaagaattt 2340
 agaagaagga gtgccccgct ttcagctttg ctttcattac agggacttta ttcctgggtg 2400
 agccattgct gccaacatca tccaggaagg cttccacaag agccggaaaag ttattgtggg 2460
 ggtgtctaga cactttatcc agagccgttg gtgtatcttt gaatatgaga ttgctcagac 2520
 atggcagttt ctgagtagcc gctctggcat catcttcatt gtccttgaga aagtggagaa 2580
 gtccttgctg aggcagcagg tcgaattgta tcgccttctt agcagaaaca cctacctcga 2640
 gtgggaggac aatgctctgg ggaggcacat cttctggaga agactcaaaa aagccctggt 2700
 ggatggaaaa gccttgaatc cagatgaaac atcagaggaa gaacaagaag caacaacttt 2760
 gacctgagga gtacaaaact ctgcgcctaa aaccctattt gtttacaatt tccgaatgct 2820
 acagttcatc tgggttttctg ctgtggacag ggaggccagg gagcacgagg cttctaacct 2880
 caacgacctc acagggcaca aggaagtagc aatgtgatga aaccccatat tttccatgtg 2940
 tatcaggtgt atgaattaag caactcaggc aaagaatcat aatcagcaaa gtttactctt 3000
 ataaaacctt aggagaggag gctaaggccc agtgagaaca gaaaggaaca tcattcttct 3060
 ctggatcttt gaatataagc acaacatgta gtgtgctgca gttaccttag aagagttttg 3120
 atcatttaaa ctgaagtga tgtttccttc ctttcccttt ttctattgaa tataatttaa 3180
 atggcactga ctctttttga gagacctca ttcaaatttc ttcttccatt ttctgtcagt 3240
 ttcttttttt ttaaattctag ttctacaaga aatatgactg atacatgctc aaagatatcc 3300
 tggccaatcc ttagaatgct atatttataa aataaaaaatt tttagtgtac ttttattttt 3360
 taaaacaaaa aaaaaaaaaa aaaaaaaaaa aaaaa 3395

<210> 6

<211> 835

<212> PRT

<213> Rattus norvegicus

<400> 6

Met Met Pro Leu Leu His Leu Ala Gly Thr Leu Ile Met Ala Leu Phe
 1 5 10 15

Leu Ser Cys Leu Arg Pro Gly Ser Leu Asn Pro Cys Ile Glu Val Leu
 20 25 30

Pro Asn Ile Thr Tyr Gln Cys Met Asp Gln Asn Leu Ser Lys Ile Pro
 35 40 45

His Asp Ile Pro Tyr Ser Thr Lys Asn Leu Asp Leu Ser Phe Asn Pro
 50 55 60

Leu Lys Ile Leu Arg Ser Tyr Ser Phe Thr Asn Phe Ser Gln Leu Gln
 65 70 75 80

Trp Leu Asp Leu Ser Arg Cys Glu Ile Glu Thr Ile Glu Asp Lys Ala
 85 90 95

Trp His Gly Leu Asn Gln Leu Ser Thr Leu Val Leu Thr Gly Asn Pro
 100 105 110

Ile Lys Ser Phe Ser Pro Gly Ser Phe Ser Gly Leu Thr Asn Leu Glu
 115 120 125

Asn Leu Val Ala Val Glu Thr Lys Met Thr Ser Leu Glu Gly Phe His
 130 135 140

Ile Gly Gln Leu Ile Ser Leu Lys Lys Leu Asn Val Ala His Asn Leu	145	150	155	160
Ile His Ser Phe Lys Leu Pro Glu Tyr Phe Ser Asn Leu Thr Asn Leu	165	170	175	
Glu His Val Asp Leu Ser Tyr Asn Tyr Ile Gln Thr Ile Ser Val Lys	180	185	190	
Asp Leu Gln Phe Leu Arg Glu Asn Pro Gln Val Asn Leu Ser Leu Asp	195	200	205	
Leu Ser Leu Asn Pro Ile Asp Ser Ile Gln Ala Gln Ala Phe Gln Gly	210	215	220	
Ile Arg Leu His Glu Leu Thr Leu Arg Ser Asn Phe Asn Ser Ser Asn	225	230	235	240
Val Leu Lys Met Cys Leu Gln Asn Met Thr Gly Leu His Val His Arg	245	250	255	
Leu Ile Leu Gly Glu Phe Lys Asn Glu Arg Asn Leu Glu Ser Phe Asp	260	265	270	
Arg Ser Val Met Glu Gly Leu Cys Asn Val Ser Ile Asp Glu Phe Arg	275	280	285	
Leu Thr Tyr Ile Asn His Phe Ser Asp Asp Ile Tyr Asn Leu Asn Cys	290	295	300	
Leu Ala Asn Ile Ser Ala Met Ser Phe Thr Gly Val His Ile Lys His	305	310	315	320
Ile Ala Asp Val Pro Arg His Phe Lys Trp Gln Ser Leu Ser Ile Ile	325	330	335	
Arg Cys His Leu Lys Pro Phe Pro Lys Leu Ser Leu Pro Phe Leu Lys	340	345	350	
Ser Trp Thr Leu Thr Thr Asn Arg Glu Asp Ile Ser Phe Gly Gln Leu	355	360	365	
Ala Leu Pro Ser Leu Arg Tyr Leu Asp Leu Ser Arg Asn Ala Met Ser	370	375	380	
Phe Arg Gly Cys Cys Ser Tyr Ser Asp Phe Gly Thr Asn Asn Leu Lys	385	390	395	400
Tyr Leu Asp Leu Ser Phe Asn Gly Val Ile Leu Met Ser Ala Asn Phe	405	410	415	
Met Gly Leu Glu Glu Leu Glu Tyr Leu Asp Phe Gln His Ser Thr Leu	420	425	430	

Lys Lys Val Thr Glu Phe Ser Val Phe Leu Ser Leu Glu Lys Leu Leu
 435 440 445
 Tyr Leu Asp Ile Ser Tyr Thr Asn Thr Lys Ile Asp Phe Asp Gly Ile
 450 455 460
 Phe Leu Gly Leu Ile Ser Leu Asn Thr Leu Lys Met Ala Gly Asn Ser
 465 470 475 480
 Phe Lys Asp Asn Thr Leu Ser Asn Val Phe Thr Asn Thr Thr Asn Leu
 485 490 495
 Thr Phe Leu Asp Leu Ser Lys Cys Gln Leu Glu Gln Ile Ser Arg Gly
 500 505 510
 Val Phe Asp Thr Leu Tyr Arg Leu Gln Leu Leu Asn Met Ser His Asn
 515 520 525
 Asn Leu Leu Phe Leu Asp Pro Ser His Tyr Lys Gln Leu Tyr Ser Leu
 530 535 540
 Arg Thr Leu Asp Cys Ser Phe Asn Arg Ile Glu Thr Ser Lys Gly Ile
 545 550 555 560
 Leu Gln His Phe Pro Lys Ser Leu Ala Val Phe Asn Leu Thr Asn Asn
 565 570 575
 Ser Val Ala Cys Ile Cys Glu Tyr Gln Asn Phe Leu Gln Trp Val Lys
 580 585 590
 Asp Gln Lys Met Phe Leu Val Asn Val Glu Gln Met Lys Cys Ala Ser
 595 600 605
 Pro Ile Asp Met Lys Ala Ser Leu Val Leu Asp Phe Thr Asn Ser Thr
 610 615 620
 Cys Tyr Ile Tyr Lys Thr Ile Ile Ser Val Ser Val Val Ser Val Leu
 625 630 635 640
 Val Val Ala Thr Val Ala Phe Leu Ile Tyr His Phe Tyr Phe His Leu
 645 650 655
 Ile Leu Ile Ala Gly Cys Lys Lys Tyr Ser Arg Gly Glu Ser Ile Tyr
 660 665 670
 Asp Ala Phe Val Ile Tyr Ser Ser Gln Asn Glu Asp Trp Val Arg Asn
 675 680 685
 Glu Leu Val Lys Asn Leu Glu Glu Gly Val Pro Arg Phe Gln Leu Cys
 690 695 700
 Leu His Tyr Arg Asp Phe Ile Pro Gly Val Ala Ile Ala Ala Asn Ile
 705 710 715 720
 Ile Gln Glu Gly Phe His Lys Ser Arg Lys Val Ile Val Val Val Ser

	725		730		735										
Arg	His	Phe	Ile	Gln	Ser	Arg	Trp	Cys	Ile	Phe	Glu	Tyr	Glu	Ile	Ala
			740					745					750		
Gln	Thr	Trp	Gln	Phe	Leu	Ser	Ser	Arg	Ser	Gly	Ile	Ile	Phe	Ile	Val
		755					760					765			
Leu	Glu	Lys	Val	Glu	Lys	Ser	Leu	Leu	Arg	Gln	Gln	Val	Glu	Leu	Tyr
	770					775					780				
Arg	Leu	Leu	Ser	Arg	Asn	Thr	Tyr	Leu	Glu	Trp	Glu	Asp	Asn	Ala	Leu
785					790					795					800
Gly	Arg	His	Ile	Phe	Trp	Arg	Arg	Leu	Lys	Lys	Ala	Leu	Leu	Asp	Gly
			805						810					815	
Lys	Ala	Leu	Asn	Pro	Asp	Glu	Thr	Ser	Glu	Glu	Glu	Gln	Glu	Ala	Thr
		820						825					830		
Thr	Leu	Thr													
		835													

<210> 7
 <211> 24
 <212> DNA
 <213> Mus musculus

<400> 7
 tgaacacata tataccaagg cagc 24

<210> 8
 <211> 20
 <212> DNA
 <213> Mus musculus

<400> 8
 accagaggggt cattctccaa 20

<210> 9
 <211> 26
 <212> DNA
 <213> Mus musculus

<400> 9
 caaaatatct gacaaaaaca agtgtg 26

<210> 10
 <211> 20
 <212> DNA
 <213> Mus musculus

<400> 10 ggtgtcatca ccatgatgga	20
<210> 11 <211> 23 <212> DNA <213> Mus musculus	
<400> 11 agtaagcaat gttcactcca acc	23
<210> 12 <211> 19 <212> DNA <213> Mus musculus	
<400> 12 tcccagcatt gatgctcac	19
<210> 13 <211> 20 <212> DNA <213> Mus musculus	
<400> 13 atgtgtgcca ttttgcattgt	20
<210> 14 <211> 24 <212> DNA <213> Mus musculus	
<400> 14 agtattgctt gataaatttg catg	24
<210> 15 <211> 25 <212> DNA <213> Mus musculus	
<400> 15 gttccgtttc tttttacaac tatgg	25
<210> 16 <211> 26 <212> DNA <213> Mus musculus	

<400> 16 atttgcctat tttattttca tttgtg	26
<210> 17 <211> 18 <212> DNA <213> Mus musculus	
<400> 17 ggaagggtga agcaagac	18
<210> 18 <211> 22 <212> DNA <213> Mus musculus	
<400> 18 gactcatgat ttgataactg ac	22
<210> 19 <211> 19 <212> DNA <213> Mus musculus	
<400> 19 gccaagaaag agcaaatag	19
<210> 20 <211> 19 <212> DNA <213> Mus musculus	
<400> 20 cgattcctat ggctcagcc	19
<210> 21 <211> 20 <212> DNA <213> Mus musculus	
<400> 21 agtaattcag cttctcccaa	20
<210> 22 <211> 22 <212> DNA <213> Mus musculus	
<400> 22	

cagatccatg atacagatat gc	22
<210> 23 <211> 21 <212> DNA <213> Mus musculus	
<400> 23 cctccagcac agtgtacaat g	21
<210> 24 <211> 21 <212> DNA <213> Mus musculus	
<400> 24 gtgtgtgtgt gtgtaagctt g	21
<210> 25 <211> 21 <212> DNA <213> Mus musculus	
<400> 25 tagaaagtgg aaacatctga c	21
<210> 26 <211> 22 <212> DNA <213> Mus musculus	
<400> 26 atgtaactca atcacagaac tc	22
<210> 27 <211> 20 <212> DNA <213> Mus musculus	
<400> 27 tcaagatcca taacctagac	20
<210> 28 <211> 22 <212> DNA <213> Mus musculus	
<400> 28 agacagacag atagacagaa ag	22

<210> 29	
<211> 23	
<212> DNA	
<213> Mus musculus	
<400> 29	
gccctgaagg taaatcagta act	23
<210> 30	
<211> 20	
<212> DNA	
<213> Mus musculus	
<400> 30	
gctcaggagg tacattgcct	20
<210> 31	
<211> 19	
<212> DNA	
<213> Mus musculus	
<400> 31	
tcagtttgct tgcattctc	19
<210> 32	
<211> 21	
<212> DNA	
<213> Mus musculus	
<400> 32	
aagtatggat gtgtgtgtaa g	21
<210> 33	
<211> 20	
<212> DNA	
<213> Mus musculus	
<400> 33	
tgctaagatt gtgatgactg	20
<210> 34	
<211> 21	
<212> DNA	
<213> Mus musculus	
<400> 34	
gactaggtga gagaaacaga c	21

<210> 35	
<211> 22	
<212> DNA	
<213> Mus musculus	
<400> 35	
ttgggctgat agtacaatat ac	22
<210> 36	
<211> 19	
<212> DNA	
<213> Mus musculus	
<400> 36	
ggagatttct aatgcttgg	19
<210> 37	
<211> 20	
<212> DNA	
<213> Mus musculus	
<400> 37	
tggacaaaca ccacataaca	20
<210> 38	
<211> 19	
<212> DNA	
<213> Mus musculus	
<400> 38	
cagactatca gatgactga	19
<210> 39	
<211> 21	
<212> DNA	
<213> Mus musculus	
<400> 39	
acattagaat catttcctgc a	21
<210> 40	
<211> 18	
<212> DNA	
<213> Mus musculus	
<400> 40	
gcaaagtctt gtgagtct	18

<210> 41
 <211> 21
 <212> DNA
 <213> Mus musculus

 <400> 41
 cttaactgga gaggaagat c 21

 <210> 42
 <211> 22
 <212> DNA
 <213> Mus musculus

 <400> 42
 cagttctgtc tttgtatctc tg 22

 <210> 43
 <211> 19
 <212> DNA
 <213> Mus musculus

 <400> 43
 agagagtgag cctcagtct 19

 <210> 44
 <211> 19
 <212> DNA
 <213> Mus musculus

 <400> 44
 ttgggtgatg attgtgaac 19

 <210> 45
 <211> 2951
 <212> DNA
 <213> Mus musculus

 <400> 45
 cctcctgcga cggggcagat cgattctaga acaaaaccaa aagtgagaat gctaagggttg 60
 gcactctcac ttctcttttg aatatagtag ttgcagaggg gcacccactg ggaggggaaga 120
 ggcaggtgtc ccagggactc tgcgctgcc aagttacag atcgatcatgt tctctcatgg 180
 cctccactgg ttgcagaaaa tgccaggatg atgcctccct ggctcctggc taggactctg 240
 atcatggcac tgttcttctc ctgcctgaca ccaggaagct tgaatccctg catagaggta 300
 gttcctaata ttacctacca atgcatggat cagaaactca gcaaagtccc tgatgacatt 360
 ccttcttcaa ccaagaacat agatctgagc ttcaaccctt tgaagatctt aaaaagctat 420
 agcttctcca atttttcaga acttcagtgg ctggatttat ccagggtgtga aattgaaaca 480
 attgaagaca aggcattggca tggcttacac cacctctcaa acttgatact gacaggaaac 540
 cctatccaga gtttttcccc aggaagtttc tctggactaa caagtttaga gaatctggtg 600
 gctgtggaga caaaattggc ctctctagaa agcttcccta ttggacagct tataacctta 660
 aagaaactca atgtggctca caattttata cattcctgta agttacctgc atatttttcc 720
 aatctgacga acctagtaca tgtggatctt tcttataact atattcaaac tattactgtc 780

aacgacttac	agtttctacg	tgaaaatcca	caagtcaatc	tctcttttaga	catgtctttg	840
aacccaattg	acttcattca	agaccaagcc	tttcagggaa	ttaagctcca	tgaactgact	900
ctaagaggta	attttaatag	ctcaaata	atgaaaactt	gccttcaaaa	cctggctggg	960
ttacacgtcc	atcggttgat	cttgggagaa	tttaaagatg	aaaggaatct	ggaaattttt	1020
gaaccctcta	tcatggaagg	actatgtgat	gtgaccattg	atgagttcag	gttaacatat	1080
acaaatgatt	tttcagatga	tattgttaag	ttccattgct	tggcgaatgt	ttctgcaatg	1140
tctctggcag	gtgtatctat	aaaatatcta	gaagatgttc	ctaaacattt	caaattggcaa	1200
tccttatcaa	tcattagatg	tcaacttaag	cagtttccaa	ctctggatct	accctttctt	1260
aaaagtttga	ctttaactat	gaacaaagg	tctatcagtt	ttaaaaaagt	ggccctacca	1320
agtctcagct	atctagatct	tagtagaaat	gcactgagct	ttagtggttg	ctgttcttat	1380
tctgatttgg	gaacaaacag	cctgagacac	ttagacctca	gcttcaatgg	tgccatcatt	1440
atgagtgcc	atttcattgg	tctagaagag	ctgcagcacc	tggattttca	gcactctact	1500
ttaaaaagg	tcacagaatt	ctcagcgctt	ttatcccttg	aaaagctact	ttaccttgac	1560
atctcttata	ctaaccacaa	aattgacttc	gatggtatat	ttcttggtct	gaccagtctc	1620
aacacattaa	aaatggctgg	caattctttc	aaagacaaca	ccctttcaaa	tgtctttgca	1680
aacacaacaa	acttgacatt	cctggatctt	tctaaatgtc	aattggaaca	aatatcttgg	1740
ggggatattg	acaccctcca	tagacttcaa	ttattaaata	tgagtcacaa	caatctattg	1800
tttttggtat	catcccat	taaccagctg	tattccctca	gcactcttga	ttgcagtttc	1860
aatcgcatag	agacatctaa	aggaatactg	caacattttc	caaagagtct	agccttcttc	1920
aatcttacta	acaattctgt	tgcttgata	tgtgaacatc	agaaattcct	gcagtgggtc	1980
aaggaacaga	agcagttctt	ggtgaatgtt	gaacaaatga	catgtgcaac	acctgtagag	2040
atgaatacct	ccttagtggt	ggattttaat	aattctacct	gttatatgta	caagacaatc	2100
atcagtgtgt	cagtggctcag	tgtgattgtg	gtatccactg	tagcatttct	gatataccac	2160
ttctattttc	acctgatact	tattgctggc	tgtaaaaagt	acagcagagg	agaaagcatc	2220
tatgatgcat	ttgtgatcta	ctcgagtcag	aatgaggact	gggtgagaaa	tgagctggta	2280
aagaatttag	aagaaggagt	gccccgcttt	cacctctgcc	ttcactacag	agactttatt	2340
catggtgtag	ccattgctgc	caacatcatc	caggaaggct	tccacaagag	ccggaagggt	2400
attgtggtag	tgtctagaca	ctttattcag	agccgttggg	gtatctttga	atatgagatt	2460
gctcaaact	ggcagtttct	gagcagccgc	tctggcatca	tcttcattgt	ccttgagaag	2520
ggtgagaagt	ccctgctgag	gcagcaggtg	gaattgtatc	gccttcttag	cagaaacacc	2580
tacctggaat	ggggagacaa	tcctctgggg	aggcacatct	tctggagaag	acttaaaaat	2640
gccctattgg	atggaaaagc	ctcgaatcct	gagcaaacag	cagaggaaga	acaagaaacg	2700
gcaacttgg	cctgaggaga	acaaaactct	ggggcctaaa	cccagtctgt	ttgcaattaa	2760
taaatgctac	agctcacctg	gggctctgct	atggaccgag	agcccatgga	acacatggct	2820
gctaagctat	agcatggacc	ttaccgggca	gaaggaagta	gcactgacac	cttcctttcc	2880
aggggtatga	attacctaac	tcgggaaaag	aaacataatc	cagaatcttt	acctttaatc	2940
tgaaggagaa	g					2951

<210> 46
 <211> 2951
 <212> DNA
 <213> Mus musculus

cctcctgcca	cggggagcat	cgattctaga	acaaaaccaa	aagtgagaat	gctaagggtg	60
gcactctcac	ttcctctttg	aatatagtag	ttgcagaggg	gcacccactg	ggaggggaaga	120
ggcaggtgtc	ccagggaactc	tgcgctgcca	ccagttacag	atcgctcatgt	tctctcatgg	180
cctccactgg	ttgcagaaaa	tgccaggatg	atgcctccct	ggctcctggc	taggactctg	240
atcatggcac	tgttcttctc	ctgcctgaca	ccaggaagct	tgaatccctg	catagaggta	300
gttcctaata	ttacctacca	atgcatggat	cagaaactca	gcaaagtccc	tgatgacatt	360
ccttcttcaa	ccaagaacat	agatctgagc	ttcaaccctt	tgaagatctt	aaaaagctat	420
agcttctcca	atttttcaga	acttcagtg	ctggatttat	ccaggtgtga	aattgaaaca	480
attgaagaca	aggcatggca	tggcttacac	cacctctcaa	acttgatact	gacaggaaac	540
cctatccaga	gtttttcccc	aggaagtctt	tctggactaa	caagtttaga	caatctgggt	600

gctgtggaga	caaaattggc	ctctctagaa	agcttcctta	ttggacagct	tataacctta	660
aagaaactca	atgtggctca	caattttata	catttcctgta	agttacctgc	atatttttcc	720
aatctgacga	acctagtaca	tgtggatctt	tcttataact	atattcaaac	tattactgtc	780
aacgacttac	agtttctacg	tgaaaatcca	caagtcaatc	tctctttaga	catgtctttg	840
aacccaattg	acttcattca	agaccaagcc	tttcagggaa	ttaagctcca	tgaactgact	900
ctaagaggta	attttaatag	ctcaaata	atgaaaactt	gccttcaaaa	cctggctggg	960
ttacacgtcc	atcggttgat	cttgggagaa	tttaaagatg	aaaggaatct	ggaaattttt	1020
gaaccctcta	tcattggaagg	actatgtgat	gtgaccattg	atgagttcag	gttaacatat	1080
acaaatgatt	tttcagatga	tattgttaag	ttccattgct	tggcgaatgt	ttctgcaatg	1140
tctctggcag	gtgtatctat	aaaatatcta	gaagatgttc	ctaaacattt	caaattggcaa	1200
tccttatcaa	tcattagatg	tcaactaagc	agtttccaac	tctggatcta	ccctttctta	1260
aaagtttgac	tttaactatg	aacaaagggg	ctatcagttt	taaaaaagtg	gccctaccaa	1320
gtctcagcta	tctagatctt	agtagaaatg	cactgagctt	tagtggtggc	tgttcttatt	1380
ctgatttggg	aacaaacagc	ctgagacact	tagacctcag	cttcaatggg	gccatcatta	1440
tgagtgccaa	tttcatgggt	ctagaagagc	tgcagcacct	ggatttttca	gcactctact	1500
ttaaaaaggg	tcacagaatt	ctcagcggtc	ttatcccttg	aaaagctact	ttaccttgac	1560
atctcttata	ctaaccacaa	aattgacttc	gatggtatat	ttcttggctt	gaccagtctc	1620
aacacattaa	aaatggctgg	caattctttc	aaagacaaca	ccctttcaaa	tgtctttgca	1680
aacacaacaa	acttgacatt	cctggatcct	tctaaatgtc	aattggaaca	aatatcttgg	1740
ggggtatttg	acaccctcca	tagacttcaa	ttattaaata	tgagtcacaa	caatctattg	1800
tttttggatt	catcccat	taaccagctg	tattccctca	gcactcttga	ttgcagtttc	1860
aatcgcatag	agacatctaa	aggaatactg	caacattttc	caaagagtct	agccttcttc	1920
aatcttacta	acaattctgt	tgcttgata	tgtgaacatc	agaaattcct	gcagtgggtc	1980
aaggaacaga	agcagttctt	ggtgaatgtt	gaacaaatga	catgtgcaac	acctgtagag	2040
atgaatacct	ccttagtggt	ggattttaat	aattctacct	gttatatgta	caagacaatc	2100
atcagtgtgt	cagtggctcag	tgtgattgtg	gtatccactg	tagcatttct	gatataccac	2160
ttctattttc	acctgatact	tattgctggc	tgtaaaaagt	acagcagagg	agaaagcatc	2220
tatgatgcac	ttgtgatcta	ctcgagtcag	aatgaggact	gggtgagaaa	tgagctggta	2280
aagaatttag	aagaaggagt	gccccgcttt	cacctctgcc	ttcactacag	agactttatt	2340
cctgggtag	cattgctgc	caacatcatc	caggaaggct	tccacaagag	ccggaagggt	2400
attgtggtag	tgtctagaca	ctttattcag	agccgttggg	gtatctttga	atatgagatt	2460
gctcaaacat	ggcagtttct	gagcagccgc	tctggcatca	tcttcattgt	ccttgagaag	2520
gttgagaagt	ccctgctgag	gcagcaggtg	gaattgtatc	gccttcttag	cagaaacacc	2580
tacctggaat	gggaggacaa	tcctctgggg	aggcacatct	tctggagaag	acttaaaaat	2640
gccctattgg	atggaaaagc	ctcgaatcct	gagcaaacag	cagaggaaga	acaagaaacg	2700
gcaacttggg	cctgaggaga	acaaaactct	ggggcctaaa	cccagtctgt	ttgcaattaa	2760
taaatgctac	agctcacctg	gggctctgct	atggaccgag	agcccatgga	acacatggct	2820
gctaagctat	agcatggacc	ttaccgggca	gaaggaagta	gcactgacac	cttcctttcc	2880
aggggtatga	attacctaac	tcgggaaaag	aaacataatc	cagaatcttt	acctttaatc	2940
tgaaggagaa	g					2951

<210> 47
 <211> 18989
 <212> DNA
 <213> Homo sapiens

<400> 47	tcccctactt	tcttcacatt	ctgcagtaaa	cttggaggct	gcatgttgaa	tatgaaagta	60
	taatgaaata	aaagaagcct	agaaccagga	atcatacctg	gggtaatcca	atcagaaata	120
	tcctcattga	gtgtttcatg	agccaggaaa	acttttatta	agtcacaata	aaatctggaa	180
	gtttatacag	caattagctt	agtctaacac	ttgtcagttt	tgtgcatatt	tcttacagca	240
	tatgcattac	ctgcaaata	aaagcaaaca	cttctaggtc	cctggcgaat	atgggattcc	300
	tccattgact	gactgattat	gggtcctgag	ttgaacttgc	tctgcatgaa	ggatgtaggc	360
	gatcaagtgg	cttgttttgc	ctctggccaa	atctctacca	ctatgcttaa	gatgcgatta	420

attatgtaca	acaaaccccc	atgacacacg	tttacctatg	taacaaacct	gctcatcctg	480
cacatgtact	tctgaatgta	aaaataaaaag	taaaaaaaaa	gaaaacaaga	ggtgggttatt	540
attctactgt	gggagaaatt	ataggcccat	aatggtaact	aatcaccacg	gtcttacctc	600
attataatac	tgcacggtga	agttcatcaa	cataagcaag	ttagatctga	taaccaaggg	660
gcttacagtt	tctaatttgt	atttgacaca	tggctcgcct	tctggaagag	cagcatagaa	720
cctagatgtc	tttgattaag	gtcagtaa	gattgagtgt	taatccatt	catttccag	780
gaaaaggaaa	cctctttaca	agtcaccacc	agggattctc	caatcacaca	taggaaaaat	840
ttccaggaag	acttctataa	aacacatgta	ttaacatctc	cgaaaacata	gttgaaagga	900
cttccttggg	cccttttctt	tagttcctca	tctagactat	caagcggttt	cctctccaaa	960
tgatgggaag	aaagtgcatt	tgtctattac	acacttgtat	tactctattc	acttaagcac	1020
tgtgtcccag	taatggggtc	tagttatgtc	tggcttgaaa	tgaccacat	atttgtttct	1080
cattcttagg	aagtggagtg	tttctgtatg	tgtatatgtg	atgggggtag	gccaggagat	1140
tttttatcta	ggcaataccc	agcctgaaat	cattattagc	atgacatgag	ttaaactgat	1200
ttctatttta	gaaagatggt	ttcaacagca	ggatgaagaa	tcaattggaa	gagctggtac	1260
attgaaagag	gtgaatctag	actttgggag	gcttcttaaa	gtatattgaa	ctagtctagg	1320
ccgtgggata	tgttcaatag	taatggtagt	agaaatggcg	actgacattt	tgggaattatt	1380
ttacagatac	aatttctaca	acttgggtgga	acatttttta	aaatgtaggt	tttattattc	1440
ggctatggtg	aaaacaacag	atcagaagat	gatgccactg	gaaatatagt	ttgttgttta	1500
cagttcctaa	gaagcggggg	catgccacac	catgcagggc	cacattggta	gcaccagagt	1560
ccgtcaggag	gcagagggag	caagaggaaa	ttataggcac	aagcttttat	tgttgttact	1620
gcagaaaagg	caaggcaagg	cagggttaagc	agggatagga	ctggctagtt	tgaataacct	1680
cagtgggctc	tggggtagag	ggtctgtctc	tagttgtctg	gtacctggac	ctgtgatgat	1740
tagggctgaa	taacagtgtc	tacttgggtg	taaaagccag	gtagaggagg	tgggttcagag	1800
gaagggtctc	ggattgctta	gtgtgcataa	ggcatgctcc	agagcaaata	ttttgctatt	1860
ttttagaact	aactagccct	ggtaagtgtc	gtctcttccc	agatgccaga	acatcaagaa	1920
cacagaaaag	aagacaattg	ggtaataaca	tgtttagcat	gagaaatgag	gaagtaaggg	1980
aaataaagtc	aaagagattt	ccaccttgga	tgactatgtc	aaagtgaac	accattaact	2040
ttccagggaa	ctaaacttta	ttgagcacct	actctgtgtc	aggcactgct	ctaaaatctt	2100
tacatgaata	atctcaatac	tcagagcaaa	gctttgacat	ggaggttgtt	tttatcttaa	2160
ctctactggt	gtgttgatgg	agtctacaag	agtttgtgcc	cagtccacca	caaaatgggtc	2220
cctcacagct	tggtttttga	cacgttggat	tggaaagtgt	tggaggatat	tacagtagaa	2280
ctatctagga	cttagcatac	ataatattcc	tgttttaaat	caggttctta	tttaacagaa	2340
acttacattg	cacttgctac	tttcagaca	ctgtcctaaa	agctttacaa	atgccagttc	2400
atttaatccc	aatacaatac	tttgagatac	atattatcat	cttcattcta	tccacatttt	2460
caatcctcat	catagctctc	atztatggaa	tgtaatgatg	atgctctaga	ctagacgttt	2520
tacgtaagtt	agcttaattc	agtaattcaa	aacacatgcg	attatcttcg	ttttaagac	2580
cagaaaacta	aagggttggt	ggtttgtata	atgtgactac	cattgcgtat	ctttatttta	2640
atacatttta	taaagtcaag	cttctgctat	gattaaaagt	gattaccaca	ttttacagac	2700
cagaaagtaa	taataagtgt	tggatgaagat	gtgaaaaaat	gagaactcct	gtacaccatt	2760
tgtgggaatg	taaaatggta	cagatgctgt	ggagaatcat	atgggtgggtg	ctcaaaaaat	2820
taaaaataga	tttaccacat	gatccagcaa	tctcacttct	gagtacgtat	ccaaaagaat	2880
tgaaaacaga	gactttaaga	gatatttgta	caaccatggt	tatggcagca	ttattcacaa	2940
tagctaactg	gtggcaacaa	tgcaagtgtc	catgaacaga	caaattggata	agcaaaatgt	3000
ggtctataca	tacaatggaa	tattgttcag	ctttaaaaaag	gaaggagggt	ttgatctata	3060
ctacacagaa	aagaaccttg	aggacattat	gcaaagttaa	ataagccagt	gacaaaaaga	3120
tacatactgt	atgattccac	ttctaagagc	tgcttagagt	agtcaagatt	atagagacaa	3180
aagtagtgca	tagattcaag	ggcctaggga	aaggggaaat	ggggagttat	ttattaatga	3240
atagtgggtg	tgattgtaca	aaaatatgaa	cataattaat	gccactaaat	tgtacacata	3300
caaattgggtc	agataataaa	ttttatgtta	tgtcatgtta	tgttatgtga	ttttaccata	3360
atacagaaaa	tgaaaaaaga	aaagaaagaa	agtaaagctt	agcggtttac	atgacttgac	3420
caatgcctca	aagccatgag	tcacccagct	gagatctgaa	cttcagtata	ttccattctg	3480
aaatcccaga	cttttcccaa	tcttcttgta	cttttcaaac	tgtgtttcag	ttgaggttta	3540
ttttcagttt	tgtatgtgag	tttcttcaca	agaaggggag	ggccaaattg	tgtcctgcaa	3600
aaacctacat	atcgaagtcc	taacccctct	acctcagact	atgactgtat	atggagagag	3660
agccttgaaa	gaggtatgta	aggtagaatg	aggtcattat	ggtgggccct	aatccaacat	3720

aactggtgtc	cttataagaa	ggggagatta	gaattcagac	acacttgctg	acaccttgag	3780
ttcagactgg	aagcctctag	aattgtgaga	aaatgaatgt	ctggtgttta	agccacccag	3840
tctgtggtat	ttccttatgg	cagccccagc	aaactaatac	aaatagtgtt	tccacagctg	3900
aaacaaaatt	ggaaaatcac	cgtcatccta	gagagttaca	agggctattt	taatagaacc	3960
tgattgtttt	cctaaattca	ccaagcccag	gcagaggtca	gatgactaat	tgggataaaa	4020
gccaaactagc	ttcctcttgc	tgtttcttta	gccactggtc	tgcaggcggt	ttcttcttct	4080
aacttcctct	cctgtgacaa	aagagataac	tattagagaa	acaaaagtcc	agaatgctaa	4140
ggttgcccgt	ttcacttctt	ctcacccttt	agcccagaac	tgctttgaat	acaccaattg	4200
ctgtggggcg	gctcgaggaa	gagaagacac	cagtgcctca	gaaactgctc	ggtcaaacgg	4260
tgatagcaaa	ccacgcattc	acagggccac	tgctgctcac	agaagcagtg	aggatgatgc	4320
caggatgatg	tctgcctcgc	gcctggctgg	gactctgatc	ccagccatgg	ccttcctctc	4380
ctgcgtgaga	ccagaaagct	gggagccctg	cgtggaggta	tgtggctgga	gtcagctcct	4440
ctgaactttc	cctcacttct	gcccagaact	tctcactgtg	tgccctgggt	tgtttatttt	4500
tgcaaaaaaa	aaaagagtta	aattacctta	aagactcaag	aagccacaga	gatcaaataa	4560
ttcattgtta	cagggcacta	gaggcagcca	ttgggggttt	gttccatttg	gaaattttga	4620
gtgctaacag	gggcatgaga	taacatagat	ctgcttaagg	tccctgctct	gctaccttgt	4680
ggctctgtga	agaaattatc	aaacctgtct	gagactagtt	ttcgcactctg	taagagaatt	4740
ataatacctt	cttcactaga	gagtaagcag	actgcttcag	tgtcatttct	tcccactggg	4800
ggtctttaca	ctcagcttca	agcagtcacc	ctgctccttt	caatctcagg	aaaaagatgg	4860
cttttgtgtg	tgtgtctcta	gagaaagaac	tttctaagtg	ggtgtcagac	ttctgtatgc	4920
agtaatatag	tttagtccag	aggatgaaaa	aaataagaga	atgaaaaagg	aaaagagaga	4980
gagagagaag	aaaaaagcaa	gagggaaata	tgtataatgt	cagctaattgc	aacagtttct	5040
ttcttagtga	aataccaatc	agctggttgg	taatcttatt	catgatggat	ctcttttgtt	5100
tttccccctgc	gcagacttca	cagttgcttt	agaaacccat	agtagagccg	aacagctaag	5160
aaaatgattt	acagtgaggc	agggtcagaa	actcaagaga	gaaaaagcca	gctgcagtcc	5220
tgaagttgag	gatataggag	aaaatcaagt	aatatttagc	aaagactaat	tcattatctt	5280
gaagccatcc	cttccctcaa	ttccctgccc	atagtcctcc	tccttgtcct	cttctctgta	5340
tcctctgtct	gttaggttaa	tggagataga	ttttctaatt	aggctcactg	cgagataaaa	5400
ccacagccaa	acttgacttc	ttttccccat	gtaccttttc	ctgtcagtcc	ctgaagcctg	5460
ttccatccctg	cccatccctt	tagttccact	gtaaggcagg	ccctcatttc	ccctggcatt	5520
gactcttaca	cactaactgc	tttcttgatt	ccagtcctct	tcctttaact	cattctgcac	5580
gttcttgttt	gttatgtact	tgcatattgt	gttattattt	ttccttaggc	ttcaatctaa	5640
caaattactc	tccttaaaaa	cttttaataa	ctctccattg	ccattagaac	agctttctac	5700
cacagggcct	ttgcaactgg	tatttcttct	acctagaatg	ctagatcagt	gctatccatt	5760
ggcaatatata	tgtgagccac	atatgtactt	ttaaagtttt	tagtagcctc	attaaaaaaa	5820
gaaacaagtg	aatttaattt	cgataatagt	tttatttaac	ttagcgtatt	taaaataatg	5880
tttaaaattt	taatataatat	ttacctatta	ttgatatatt	tacattcctt	gtttgggtact	5940
aagtctggaa	tttagtatat	attttacatt	taccacactt	ctcaatttac	actattcaca	6000
tttcttgtgt	ttgataactg	tgtatggcta	gtgactaccg	tattggtcag	tgcagcccaa	6060
gtccttttca	tgctttaatc	actccattca	gatctctgat	taaatgtccc	ctcctcaggg	6120
cagtcttctt	tgattgcccc	atgtagagct	ctccagcctc	acttatttgc	ctcaaatccc	6180
cttatactgc	ttaatatatt	tttttctaga	gcacaacatt	ttatatattt	gtttgtttat	6240
tttctctctc	tccttttgta	atggaatcgg	taaggaggca	ggatcattgc	tggttttatt	6300
taccactata	tttccagtgg	ccagcacaca	gtagccgcta	gatgtgtaag	tgataaatga	6360
ttgaaataat	tgctgcagga	caaagtctga	ggccctcctg	atctggcttg	ccctcttact	6420
tagatttcac	cactcccacc	actcaccagc	taatctgagt	ttgttttcca	ctctttacgt	6480
gctcacgttg	tcctctcctt	aggacatggt	tttcttcccc	tttccacata	tctaaacctt	6540
actcatcttc	caagacccac	tttaaaatct	tccttttctg	ggaagccttt	cctgaatcca	6600
gacttgatct	ctgctttctc	tgaaccacag	ggcatatttt	ctaagcctat	tttatggccc	6660
cttgagatag	tgtttagcttt	gctcctatct	aaactcttac	tctagactgt	gagtccattg	6720
aagtctggag	ctgcatcata	tttttctttg	taatgcccac	agcacttggc	aggaaatgcc	6780
tacaatttgg	acttaagtaa	accttcattt	aatcagttat	tcaatcagtt	agtgattcag	6840
caaatattta	ttgagcacca	accatttgcc	agacaccatt	ctgagtgcctg	gagacaaaagc	6900
agtgggcaaa	cccatcaaac	ttgcaatgga	atacaggaga	tgaacaatac	gatgagaaca	6960
atcagataga	caacataatg	ttagatggtt	gtgcttctctg	tgaaagggaa	taaaagaggg	7020

caaagaaaga	gtgcctggca	ctgtttctat	tagacaatat	tgtctttgag	gctccatggc	7080
ttgcaacatt	taagcagaca	tacgaatgaa	gatctgcatg	tttgaactct	gactttgcgc	7140
atattacttc	atctctttga	atctccatct	tcctcatctt	taaatgctta	tttgaagatt	7200
aagtgaagt	atataacaaa	caagaactat	gcaggcgtat	ggtaagggat	taatgataga	7260
tgataataat	taatgttgac	atctattgat	cacttatact	gtagcgggct	tttaaataaa	7320
ctctttaaac	accttatctc	atttaactct	tcaaacattc	tattggtttc	aaacaacaga	7380
aaactacaat	tagctggcct	ctgcaaggaa	ttttgttgga	ggaaatgaga	gcattcagaa	7440
attagatggg	agcgttagag	aattaggctt	acaaagaatg	tgggaaagta	ggctagaaag	7500
cagtgtaaaa	acaaagacag	cataaagcac	ttgaccttat	ttactagggt	ccaccatggg	7560
aatccatgca	ctctaaagat	ttccccctat	ttctacatca	ctttgctcaa	gggtcaatga	7620
gccaaggaaa	agaatgcagt	tgtcaaaatc	tgggccatga	ctaaggaagg	tctggacatc	7680
ttgactgcc	gacagtctcc	ccaatgatat	ggagtattta	gaatgatact	ggatattttta	7740
tttatttttt	gtattttcaa	cttttaagtt	cagaggcaca	tgtgcagagc	atgcagggtt	7800
attacataag	taaagtgtgt	ccatggtgat	ttgctgcata	gatcatgaaa	atatggaacg	7860
catcatggat	ttgtgtgtca	tccttgtgca	ggggccatgc	tcactcttct	tgtatccttc	7920
caatttttagt	atatgtgcta	ctgcagcaag	cacgatattg	gatattttat	tacctacatt	7980
ttacatatga	taaaatgagg	ctcactgagg	tttttctttt	gttcgtttta	ttttgttttg	8040
tttttaaaga	cttggcccta	aaccacacag	aagagctggc	atgaaaccca	gagctttcag	8100
actccggagc	ctcagccctt	caccccgat	ccattgcttc	ttgctaaatg	ctgccgtttt	8160
atcacggagg	ttagaatgct	gagcacgtag	taggtgctct	ttactttcta	atctagagta	8220
agacaattta	taagcatgaa	ttgagtgaat	ggatggatgg	atatatggat	ggaaggatgg	8280
acagatggat	gaaaggttga	ctgaattttg	tgcttgacac	aaaagaggcc	cctctccacc	8340
atctctggtc	taggagaggg	gagttgggag	accatgcagt	aaagatactt	catgtcatgt	8400
gtaatcattg	caggtgggtc	ctaataattac	ttatcaatgc	atggagctga	atttctacaa	8460
aatccccgac	aacctccctt	tctcaaccaa	gaacctggac	ctgagcttta	atccccag	8520
gcatttaggc	agctatagct	tcttcagttt	cccagaactg	caggtgctgg	atttatccag	8580
gtaatgaatc	cacttttaca	tactgcacaa	ggtgaggtgt	tcattgtcct	atcattcat	8640
tattggactg	gaaagcttgg	tttgtggagt	ctcatcttca	ttcacttatt	cattcatata	8700
acagatgtct	tattaactat	ataaccttga	gcaagctacc	tctattctcc	aggtctcagt	8760
tttctaattct	gtgaagttag	cagttggctg	agacagcttc	taagggcaat	tctaattttta	8820
ggttttcttt	taagacagga	gagaaaatta	gcttaaattc	tttcataagc	agctattttat	8880
tgactacttg	ctatatgttg	tacactctgc	aagaagacag	gcatatattg	atatataaca	8940
cacagccctt	gttggttaagg	aggcatatct	tcttgaaaga	gttaatacct	taaagtcctg	9000
ggtaggttcc	tgggtacata	gtatatagtc	aacacatttt	aattatgatt	ttttggatct	9060
ggaaactgat	ataaagatag	cgacatataa	cagtaggtga	taaattatgt	ttaaactaaa	9120
ggtaactaat	tgtatttttc	agaagagggg	ccttctctgt	ggtaggtagt	caagaaagat	9180
ttcatgaact	gcataagatt	caaacaatgt	ctagaatatt	aaaactagtg	tacaggatag	9240
ggaattagga	aaagacaagt	aacccaagga	gaaagatgtc	aagattaaag	gaaaacatct	9300
gctgtgggca	gggaataatg	gctaagattt	tcttttctga	tgcagggaag	tatatcgttt	9360
gttggtggcag	gtgaaatgtc	atcttgatat	tttaggggaa	ccaaattcta	aaagggtttt	9420
catcatcggg	gccttatttg	caaatcgaac	tagataatgg	atcatgttct	ctgcaatggg	9480
ttgtaaaaca	tttcaaaaca	ttttacatat	tttttattat	agaaattatt	gataaagact	9540
aaggtcacag	tataaaaatc	cttttttagag	cagacatttc	tgtagaagag	tgaacatatg	9600
acctattata	ctctaatttg	gatatagata	ggatgtaaca	aaggagtaat	ggaacaattc	9660
aaaggcagtg	gtatagtgca	tagagtcctg	ttggggctcag	aagacctgag	ccaagtttac	9720
ccccaacatt	tataaccatg	taaccttagg	catattactt	catctccctt	aatcttaggt	9780
ttcatatctg	atcaatggaa	atgatgaaac	ttattctgct	ggattaaatg	tgataataaa	9840
tattaatatg	ctgtatatat	ttaaattttt	ataaaatata	ttttataagc	ataaagtatt	9900
cttacagaat	ttcatttaggt	ttttaaaata	atttcaactt	ttatttttga	ttcagggttt	9960
tacatggtta	tattgcgtaa	tgctgaggtg	tagggtacaa	tgcataccat	cactcaggta	10020
gtgagcatag	tacccaatag	ttagtttttc	aaccttgcct	gctttctctc	tatccccctt	10080
ctagtaatcc	ccagggtcta	tttttgcct	ctttatgtcc	atgtgtactc	catgttttga	10140
tcctacttat	aaagtggaaa	ctcatgggat	ttggctttct	gttcctttgt	taatttgctt	10200
aggataatgg	ctactagctg	catctatgcc	attatgttct	aaatttcagt	ttcctgcatg	10260
aaaattttgt	caagtactct	attaaggtag	accacctctc	cctttttttt	ttttcaaaca	10320

agaagtagtt	tttcacccaaa	caatgtctct	tatgtaattc	atcttcaatc	cactgggatac	10380
ccaataaact	tgccccagaa	accttaaate	tgtgcttaca	gagaggccag	cttcccttct	10440
tgttaaccca	taggagattc	tgaattaggg	caagcacaaa	agatagcaca	atagacatcc	10500
tttgcccttt	cgtacagtgt	tcacatacag	taactcaact	agtcttgtaa	gaatgctttg	10560
tgatagacca	ggcagccttc	tttcccctat	agaaatatat	atatatttct	ttttataggt	10620
gaggaaactg	aagcttgaat	aatttaaagt	acttatatac	attatcattg	cttggttagcc	10680
acagaccaga	gatttaagtt	cacatctcca	gaatccaact	taaatgtttt	ctttgtctta	10740
atactctact	tctctaaagt	gattatcacc	aatgtaatga	tatagagaca	cagcaagacc	10800
ctttccctct	cacctaatgt	atagagcaat	gcagagatag	aatgatgggc	tataacaatc	10860
atataattga	aagaaagaac	ttcaaaaata	atcaagttca	gctgtttgac	ttataaatgt	10920
gataactaaa	acctagagag	gaaaagaggt	actcaagatc	acacagtagg	agaggactgc	10980
agaaacacca	aacccaagct	cttttgtcca	ctcttccagc	gttctttcta	ctatactgcc	11040
tatcctttat	ctagttacca	ataaataaca	aaagcttgga	ccacaatgct	tttattgtct	11100
aggaaactcc	tgaagaagct	aaataaaatg	gggtggggaat	attgtaaatg	taattcaggc	11160
tggattaaga	agaacttat	ttgtacattg	taactgacaa	gcacctgcaa	tgctgaaagg	11220
aatttttcat	tggttgctg	tttgtctggt	gcaccaaagc	cctgtctcta	ggacatgtct	11280
ctgaacattg	tgtgtagcat	ggctttcatt	tcttttagga	taaaattcaa	aaccttttat	11340
ctggttggtg	aaactctgcc	taattgggaa	ccttctttct	ccacaactcc	atattgtaca	11400
ctccaatttc	atctctgttc	tccaaccatg	gaagctatct	gtcatgattc	ctccttgtgt	11460
catttttttt	ctgtcaacct	tggggctttt	gtgtttgctg	ttcacttcac	ctccttttat	11520
tgttaacttc	tactcatctt	tcaattttca	acttaagtgt	tctcagagaa	acctactttg	11580
attttcttgg	tccacaacgg	ttctctggat	gtgaactctt	atagcacata	attttcactt	11640
ttttccacaa	aactcgctcc	tatcacctgt	tacaagcatt	tacctctgat	aacaagaact	11700
ttcaaataatc	tagctgtcat	gtaagcactt	ttcataaaca	ttaagagtat	ctgtgacact	11760
tatgtgtaat	gtttcgtatc	tctgaaattg	atattttacca	gtcattttatc	ttggctacca	11820
actaacaact	atccatatta	tctgtaccaa	tcagatgtat	aatcacaatt	ttgtgtgaca	11880
gaaaattggct	aaacttgatc	caaggctatt	acatgcttta	tcaactgcac	aatctttata	11940
tatgtcaatt	attgatcttt	aactgatttc	cttcttatgg	attttctcct	ctgcttatca	12000
tgtatggcta	acatgacaaa	aaagagccta	tcatctgcagc	cagtatgata	atactcagtc	12060
tgtggggctt	cttatttgct	tattccatca	tcatctgtcc	tgcttgatgt	ctttgcctat	12120
gcacaatcat	atgaccatc	acatctgtat	gaagagctgg	atgactagga	ttaatattct	12180
attttaggtt	cttattcagc	agaaatatta	gataatcaat	gtctttttat	tcctgtagggt	12240
gtgaaatcca	gacaattgaa	gatggggcat	atcagagcct	aagccacctc	tctaccttaa	12300
tattgacagg	aaaccccatc	cagagtttag	ccctggggagc	cttttctgga	ctatcaagtt	12360
tacagaagct	gggtggctgtg	gagacaaatc	tagcatctct	agagaacttc	cccattggac	12420
atctcaaaac	tttgaaagaa	cttaatgtgg	ctcacaatct	tatccaatct	ttcaaattac	12480
ctgagtattt	ttctaactctg	accaatctag	agcacttgga	cctttccagc	aacaagattc	12540
aaagtattta	ttgcacagac	ttgcgggttc	tacatcaaat	gcccctactc	aatctctctt	12600
tagacctgtc	cctgaacctt	atgaacttta	tccaaccagg	tgcattttaa	gaaattaggc	12660
ttcataagct	gactttaaga	aataattttg	atagttttaa	tgtaatgaaa	acttgatttc	12720
aaggtctggc	tggtttagaa	gtccatcggt	tggttctggg	agaatttaga	aatgaaggaa	12780
acttggaata	gtttgacaaa	tctgctctag	agggcctgtg	caatttgacc	attgaagaat	12840
tccgatttagc	atacttagac	tactacctcg	atgatattat	tgacttattt	aattgtttga	12900
caaatgtttc	ttcattttcc	ctggtgagtg	tgactattga	aagggtaaaa	gacttttctt	12960
ataatttcgg	atggcaacat	ttagaattag	ttaaactgtaa	atttggacag	tttcccat	13020
tgaactcaa	atctctcaaa	aggcttactt	tcacttccaa	caaagggtggg	aatgcttttt	13080
cagaagttga	tctaccaagc	cttgagtttc	tagatctcag	tagaaatggc	ttgagtttca	13140
aagggttgctg	ttctcaaagt	gattttggga	caaccagcct	aaagtattta	gatctgagct	13200
tcaatggtgt	tattaccatg	agttcaaact	tcttgggctt	agaacaacta	gaacatctgg	13260
atttccagca	ttccaatttg	aaacaaatga	gtgagttttc	agtattccta	tcactcagaa	13320
acctcattta	ccttgacatt	tctcatactc	acaccagagt	tgctttcaat	ggcatcttca	13380
atggcttgct	cagtctcgaa	gtcttgaaaa	tggctggcaa	ttctttccag	gaaaacttcc	13440
ttccagatat	cttcacagag	ctgagaaact	tgaccttctt	ggacctctct	cagtgtcaac	13500
tggagcagtt	gtctccaaca	gcatttaact	cactctccag	tcttcaggta	ctaaatatga	13560
gccacaacaa	cttcttttca	ttggatacgt	ttccttataa	gtgtctgaac	tccttccagg	13620

ttcttgatta	cagtctcaat	cacataatga	cttccaaaa	acaggaacta	cagcattttc	13680
caagtagtct	agctttctta	aatcttactc	agaatgactt	tgcttgact	tgtgaacacc	13740
agagtttcct	gcaatggatc	aaggaccaga	ggcagctctt	ggtggaagt	gaacgaatgg	13800
aatgtgcaac	accttcagat	aagcagggca	tgctgtgct	gagtttgaat	atcacctgtc	13860
agatgaataa	gaccatcatt	ggtgtgtcgg	tcctcagtgt	gctttagta	tctgtttag	13920
cagttctggg	ctataagttc	tattttcacc	tgatgcttct	tgctggctgc	ataaagtatg	13980
gtagaggtga	aaacatctat	gatgcctttg	ttatctactc	aagccaggat	gaggactggg	14040
taaggaatga	gctagtaaag	aatttagaag	aaggggtgcc	tccatttcag	ctctgccttc	14100
actacagaga	ctttattccc	ggtgtggcca	ttgctgccaa	catcatccat	gaaggtttcc	14160
ataaaagccg	aaaggtgatt	gttgtgggtg	cccagcactt	catccagagc	cgctgggtga	14220
tctttgaata	tgagattgct	cagacctggc	agtttctgag	cagtcgtgct	ggtatcatct	14280
tcattgtcct	gcagaagggtg	gagaagaccc	tgctcaggca	gcaggtggag	ctgtaccgcc	14340
ttctcagcag	gaacacttac	ctggagtggg	aggacagtgt	cctggggcgg	cacatcttct	14400
ggagacgact	cagaaaagcc	ctgctggatg	gtaaatcatg	gaatccagaa	ggaacagtgg	14460
gtacaggatg	caattggcag	gaagcaacat	ctatctgaag	aggaaaaata	aaaacctcct	14520
gaggcatttc	ttgccagct	gggtccaaca	cttgttcagt	taataagtat	taaagtctgc	14580
cacatgtcag	gccttatgct	aagggtgagt	aattccatgg	tgactagat	atgcagggct	14640
gctaattctca	aggagcttcc	agtgcagagg	gaataaatgc	tagactaaaa	tacagagtct	14700
tccaggtggg	catttcaacc	aactcagtca	aggaacccat	gacaaagaaa	gtcatttcaa	14760
ctcttacctc	atcaagttga	ataaagacag	agaaaacaga	aagagacatt	gttcttttcc	14820
tgagtctttt	gaatggaaat	tgtattatgt	tatagccatc	ataaaacctat	tttggtagtt	14880
ttgactgaac	tggtgttcca	ctttttcctt	tttgattgaa	tacaatttaa	attctacttg	14940
atgactgcag	tcgtcaaggg	gctcctgatg	caagatgccc	cttccatttt	aagtctgtct	15000
ccttacagag	gttaaagtct	agtggctaag	tcctaaggaa	acctgattaa	cacatgctca	15060
caaccatcct	ggtcattctc	gagcatgttc	tattttttaa	ctaataagct	ctgatataat	15120
tttattttta	tatatccagt	tttcattttt	ttacgtcttg	cctataagct	aatatcataa	15180
ataaggttgt	tttaagcgtg	cttcaaatat	ccatattaac	cactattttt	caaggaagta	15240
tggaataagta	cactctgtca	ctttgtcact	cgatgtcatt	ccaaagttaa	tgctacttaa	15300
gtaaatgactg	tcattgaaagc	agcattgaaa	taatttgttt	aaagggggca	ctcttttaaa	15360
cggaagaaa	atttccgctt	cctggcttta	tcattggaaa	tttgggctag	aggcaggaag	15420
gaagtgggat	gacctcagga	ggtcaccttt	tcttgattcc	agaaacatat	gggctgataa	15480
acccgggggtg	acctcatgaa	atgagttgca	gcagaagttt	atttttttca	gaacaagtga	15540
tgtttgatgg	acctctgaat	ctctttaggg	agacacagat	ggctgggatc	cctccctgt	15600
acctttctca	ctgccaggag	aactacgtgt	gaaggtattc	aaggcaggga	gtatacattg	15660
ctgtttcctg	ttgggcaatg	ctccttgacc	acattttggg	aagagtggat	gttatcattg	15720
agaaaacaat	gtgtctggaa	ttaatggggg	tcttataaag	aaggttccca	gaaaagaatg	15780
ttcatccagc	ctcctcagaa	acagaacatt	caagaaaagg	acaatcagga	tgtcatcagg	15840
gaaatgaaaa	taaaaaccac	aatgagatat	caccttatac	caggtagaat	ggctactata	15900
aaaaaatgaa	gtgtcatcaa	ggatatagag	aaattggaac	ccttcttcac	tgctggaggg	15960
aatggaaaat	ggtgtagccg	ttatgaaaaa	cagtacggag	gtttctcaaa	aattaaaaat	16020
agaactgcta	tatgatccag	caatctcact	tctgtatata	tacccaaaat	aattgaaatc	16080
agaatttcaa	gaaaatat	acactcccat	gttcattgtg	gcactcttca	caatcactgt	16140
ttccaaagtt	atggaaacaa	cccaaatttc	cattgaaaaa	taaatggaca	aagaaaatgt	16200
gcatatacgt	acaatgggat	attattcagc	ctaaaaaaag	ggggaatcct	gttatttatg	16260
acaacatgaa	taaaccggga	ggccattatg	ctatgtaaaa	tgagcaagta	acagaaagac	16320
aaatactgcc	tgatttcatt	tatatgaggt	tctaaaatag	tcaaactcat	agaagcagag	16380
aatagaacag	tggttcctag	ggaaaaggag	gaagggagaa	atgaggaaat	aggagattgt	16440
ctaattggta	taaaattata	gtatgcaaga	tgaattagct	ctaaagatca	gctgtatagc	16500
agagttcgta	taatgaacaa	tactgtatta	tgacttaaac	attttgttaa	gagggtacct	16560
ctcatgttaa	gtgttcttac	catatacata	tacacaagga	agcttttgga	ggtgatggat	16620
atattttatta	ccttgattgt	ggtgatgggt	tgacaggtat	gtgactatgt	ctaaactcat	16680
caaattgtat	acattaaata	tatgcagttt	tataatatca	attatgtctg	aatgaagcta	16740
taaaaaagaa	aagacaacaa	aattcagttg	tcaaaactgg	aaatatgacc	acagtacaga	16800
gtgtttgtta	ctgagtgttt	cagagtgtgt	ttggtttgag	caggtctagg	gtgattgaac	16860
atccctgggt	gtgtttccat	gtctcatgta	ctagtgaag	tagatgtgtg	catttgtgca	16920

catatcccta	tgtatcccta	tcagggctgt	gtgtatttga	aagtgtgtgt	gtccgcatga	16980
tcatatctgt	atagaagaga	gtgtgattat	atcttctgaa	gaatacatcc	atctgaaatg	17040
gatgtctatg	gctgtttgag	atgagttctc	tactcttggt	cttgtagagt	agtctcccct	17100
tatcccttat	gcttggtgga	tacgttctta	gaccccaagt	ggatctctga	gaccgcagat	17160
ggtaccaaac	ctcatatatg	caatatTTTT	tcctatacat	aaatacctaa	gataaagtTC	17220
atcttctgaa	ttaggcacag	taagagatta	acaataacta	acaataaaaT	tgaatagtta	17280
taataatata	ttgtaataaa	agttatgtga	atgtgatctc	tttctttctc	tctctcaaaa	17340
tatcttactg	tactgtactc	acctatTTTc	agaccataac	tgaccatgaa	acctgggaaa	17400
gtgaaactgt	ggataagtga	ggaactaaca	tacatacatg	attgtttatc	tacagatgta	17460
tgccctcagtt	tcttagtatg	cttgaaaatg	tatgattttg	tgtatatccg	tgctacatgt	17520
aagtgtgggt	ctattcatat	ttgaatatga	attctgcata	agtgtgttta	ttcaagcaaa	17580
tgtacaaggc	tctgagaagg	aagatcaaca	tacaacttgg	aatatttcaa	ggccgaaata	17640
ttcaaggctg	acattggcct	ccttcctatc	agttccctct	cccagatgga	aattctagaa	17700
atggcaggtg	aggtggacaa	gcagggaaaag	aaattatatg	catagaacag	aaggagaaga	17760
aagagtaaag	tcaggcctca	gccagcctct	ttttagctct	ttaaatcctc	tggttttaag	17820
agggataaag	ggtggaataa	ggataaatta	atgccaatgt	taatgcctta	aatttTgtgtg	17880
ataccttaca	acttgaaaca	tattcacaaa	actatatatt	tgaatatctc	attagctgag	17940
taaggtagca	aatcataatt	aactttttcc	atTTtattga	tgggaaagct	gaagttcaat	18000
gaagtaaatt	tttcaatagc	ccacagagta	ggaaagtgc	aaaacctgag	cctgggcctc	18060
caggtcactc	aaggacactt	tctttcttcc	acacccaatt	gcttcagtct	taaagttggc	18120
aaaacaggaa	gtgaaactcc	tgcagttttc	tgtgtgggtg	acactagcaa	gggtttctca	18180
gttgaagcca	tgaatcatta	agccaataca	tatgcatata	tgttatacat	accaaTgat	18240
ttattttataa	ccctatcttt	ccataaagga	cttgaaggag	cttcaaacia	aggatatgtg	18300
aacaataggg	ttaatcaata	ataagtagaa	aatctggaca	tagaataaaa	agaggagaga	18360
aagacaccga	gaatgagcgt	taatacagtg	ctttccattt	ttctgggtgt	ttgagtgcg	18420
tggcttttgg	agaaagccaa	aactcaaat	cactccttat	caactgtgtg	ccttgggctc	18480
catttctctg	agagtctact	tagctccaat	gtaaaaaag	aatagaacta	tgactttgta	18540
aggTgtctct	aaggattgaa	aatcatgtat	tatgttcaat	acggggacac	tgTccttatg	18600
gggtgactact	cccctaagac	tttattaaga	gggactagg	agaagcactg	ggaggtcttc	18660
tcagtaacaa	cactaaagta	attgctatTT	ttccagcctg	tggaaaccaca	gaagtgcactg	18720
taactaaaat	tagacatttc	tttctgattc	attctctact	cacgggattg	tcagacccca	18780
gtcttcttct	ggactctata	aacttttttag	aaatcatcag	caggctcctg	gagaagctta	18840
aatgaactca	cacaatatgt	gacagtgaac	tccttgggag	agtgaaaacc	aaagtctaag	18900
ccagtgtctc	catttacttg	tgtgattgtg	ggcaagtcac	tcaagtgcct	tgaggctcag	18960
gtcttaattc	atgaabydca	bydcabydc				18989

<210> 48
 <211> 50000
 <212> DNA
 <213> Mus musculus

<400> 48						
tttcacatcc	atgataggTc	aagaatgtaa	tctaagttat	aaggtttcac	ctagtaacca	60
gatatatgga	gatagaaaat	aaacaataca	cagtgggaag	acctggcaca	ttgtgaggta	120
agtgagtctg	aattctgcat	gccaatgtag	gagactccag	gcaaagctcg	tggtgcagag	180
taagtctcaa	ggtagcaggg	gagaagaatc	ttttcttttg	gaggaattaa	cccttttttag	240
tttatggcct	tcaacctact	gggtctggcc	cactcacatt	agagtgcctt	gcttagtctt	300
agacatgaat	ggaatgtaaa	gtatctttat	aagagtgaaa	gactatctgt	gtgtcatgac	360
ctatctatgt	ttacatgtaa	tattaaccat	aacatgagca	ctgacatttc	tggtattgtga	420
ccttcccgtc	agaatatgta	ttggaaggta	aaactgaatc	tttttttctt	tattgctttt	480
acttccctct	ttgtgtatat	attcacacaa	aacttctttt	agattattct	gttttcttct	540
acaatgtcca	tatttgcttc	tctcctaggt	tttggaacaat	tattttccta	taaaatatta	600
gtgtgttccc	tcgccctgtt	cattataagt	gaattaaact	tgctgatact	ttttaaaagt	660
ttgtattaac	atagtttaag	tatcttcctt	tatgctaata	aagattgcag	attgaacaaa	720

at ttgttagat	tgtagtatgt	gactcactgg	cctaaaccct	gtcctgtct	cttacaatgc	780
aatcttgggt	aaatgatttt	acaatttatg	cctcaatttt	ttcttataat	ttgaatgcat	840
taatacatat	gaggtattaa	aaagtactcg	acaaataaaa	ggttcttggg	aaacacttgg	900
tgaatatagt	cttatgactg	acataagctt	ctaccagttg	aagtgaagaa	tggggttcaa	960
cccgtcatga	ttgttttagga	agtatatcaa	atatatgaaa	ttaagcgaat	cttcctctca	1020
gtcccatcct	aaaacccct	ggcgactctg	attctgcata	tttgcaatgt	agttttctgt	1080
atgaaaaata	gtgagccact	agaaggtaag	gggagtaagg	aaagatgtta	aggggttgat	1140
at tttaggatc	tggaaaataa	catttacaca	cttgtccccc	accctacaa	cattgaacc	1200
tgtataagat	atagatatga	ataaagcaca	gattttcatc	tctgaccact	atcctcttca	1260
taaagtaaaa	tttttgtgac	ttacatctta	gatttcctct	gatggctttg	atgaagctag	1320
gtatgcaagg	gaagaaat	tatttacata	aattccatgt	aaaacatata	aattcatgtg	1380
tttatataca	cattttataat	tgtaatgtat	ttgccacatt	gggataacaa	tactctcatc	1440
aacagctata	aacctcatta	ttaataatga	gaaacattct	tttgagt	atcatggaag	1500
tataagagtt	ccccaaaaca	atatagccta	gtgctgttgt	tttgagaga	ttggaggtat	1560
gtccctattg	ctgaaaacac	tgacactatg	aactttgaac	aaaagaccat	gagggtttcg	1620
gtagaatttg	gtttgtatga	ccacaaattg	tcttttaacc	agcaatgtca	tactggagaa	1680
tgcatagttt	ttcagatatg	tattcatgct	ttgtgctttt	atttaatttc	cttcttattg	1740
ggttttattc	at ttgtatgg	tttgttgaaa	tttcagtatt	ttgagataag	agctcactct	1800
ctagcccaag	ctgatcaaaa	attcactgtg	tagcttcaac	tgaccttaaa	cttaagacaa	1860
tctttctgct	ttatccttcc	aagtgtctggg	attacaggca	cagcccagct	tgtggagt	1920
aattttctaa	aggacattgt	gatgaatatc	cttgtacact	tatctttgga	gcctgcccat	1980
gaatcaccac	atgattaatt	ttctagagaa	aaactgcttt	gtttctgttg	ttcatcttta	2040
gaatctttaa	tttttttctt	tgagagattc	atacgtgtgc	ccaatacact	ttaatcctag	2100
ccatcttcca	ttccctctgc	aaatttcccc	caaactgtcc	caacttcatg	acctctctgt	2160
tgttgatatg	tattaaacac	acttagtcta	tttagtgcta	tcagtatgtg	cattgggtgtg	2220
gggccacctta	tggaaatag	aacaaactgt	ttcaaaagg	cctcattctt	gataaaagct	2280
tgtcaggaac	cgcctaggaa	aggttaaggc	ttgtagggtg	ccttcctgga	tgtggcctac	2340
tctttttgta	tactctagaa	tgtgtgagct	ctgagaggca	agatcccaag	cttcatgcag	2400
ctgacagaca	tttttcctat	cactgttgca	tagcctaaca	attcatgggc	atcagctcac	2460
ctcaattagc	aaatttcctg	cagatcaaca	taaagataaa	ctcttgtaga	ttagtgtgt	2520
ttagatgaat	taatgatttt	atagaattcc	tcatttgatt	catagaattt	taagaagaaa	2580
gttttaagag	aaagtttttg	ttagaaaaat	gttataaagt	tagaatcaag	aatagaatat	2640
gtcatttcct	cataatcata	agataaagct	gcataataag	gaatacagt	agctttcaca	2700
attactaaaa	taggcttggg	tcaaatttgt	attcaaggaa	aaaacattca	ggccaagga	2760
gaaagccaca	ggtatgcact	atgataagac	aagggtcaagc	aaaactgttg	ctttgaattt	2820
atgagcatat	agaatgaaag	actgctttga	agttagtatc	agcctcctcc	tgtaaattcc	2880
at ttgtgtga	acattttatc	tatgaagtaa	tttgctaata	actgtttatg	tataaaaagg	2940
ccgaagaaaa	gaaataaagg	tgtgatgggt	tggcttggag	gggctctgca	agactcacc	3000
atccctccct	ccatccatcc	atccacacat	gtccatctat	ccatccctcc	ctccatccat	3060
ccatccacac	atgtccatcc	atccatccat	ccatccatcc	atccatccat	ccatccagtt	3120
atagtgggtg	agtcattttc	tgtttcacct	agtatatatg	tattcctgtg	agtgactttt	3180
acctcttttg	tacacaagga	gttaactagc	caggcctgag	aagggccct	ggcctgctgg	3240
ctagaaagaa	gagcactagc	aataaatcct	ctactgaatt	gtccctgtct	atacagcata	3300
tgttaattgc	cagagaatta	tatactaagt	ttataaagta	aataagaatt	aagctttaca	3360
gcgcttaatg	atgcacaaaa	cagttagaga	actaaaaggc	cagagatcat	caatcttttg	3420
acctgcatct	gatgttgctg	cctacctcag	cttgttcccc	taagccagca	gccccctgac	3480
ccccagtaaa	aactgattct	ttttaattgg	ttattatatt	tgtttacatt	tcacatgtta	3540
ttccctctcc	cgggtttttcc	tctgcatact	ccccatcccc	tccagctgcc	ccctgcttct	3600
atgaggggtg	tccccaaccc	acttaccac	tcttgctca	ctgccctagc	attcacctat	3660
actgtggcat	tgaaccttca	tgggaccaag	ggcctcctgt	ccaattgatg	ccccataagg	3720
ctcttcctat	gggggtgcaa	accccttcag	ctccttcagt	cctttctcta	actcctccac	3780
tggggctccc	gtgctcattt	cgatgggttg	cttcaagcat	tctcctctgc	at tttttcagg	3840
aatcaattgc	caatgagtct	tcagtttagga	gtcgggttcc	ataggtttca	actccatcca	3900
tgtgtgggtt	gtggctatct	tgatttcgtc	cagatgaact	ctagatgaac	tccttggtatg	3960
tagtgggttg	aatatgtttg	gctcacggga	tgacactatc	aggaggtata	accttattgg	4020

aataggtgtg	gctttgttgg	aggaagtatg	ttaaagtatt	ggagggcctt	gaggtttcct	4080
agtgtctcaag	ctctacccag	tcgagaagag	agcttctttt	ttcttgtctg	actgcccaag	4140
acagaaacct	tctgactgcc	ttcagatcaa	aatgcagaac	tctaggggtcc	ttctccagca	4200
ccatgtctgc	ctggatgctg	ccatgctttt	tgacattatg	ataatggatt	gaacctctga	4260
agctgtgagc	aagcctcaat	taaatgtttg	tatttatgag	aattgccttg	gtcatgggtg	4320
ctcttcacag	caataaaaac	ctacaacaca	tagcttctgt	aaatttatgt	gtgcaacata	4380
cctgtcatgc	tctgaatgca	ctgtttgctc	agctttgcat	agcttatcta	caataacatt	4440
tccttataag	gctcaggaac	aattacagaa	gagtgggtaa	agatgttgta	agagccattg	4500
acttgggaga	actactgcaa	aacagtgagt	tccagacaca	actctctctt	caatgtgggtg	4560
ctccttgtaa	tttaatcccc	atacctcaaa	ccaagcacat	ctttcacact	ctgttcccca	4620
aattaacata	tagcttgatt	taatttagac	ataatcagtt	gctactggag	gacttcctgc	4680
aattaaaatt	gatgtttaca	catttataag	aaaattaaca	aattatttgt	agtgcaatta	4740
agtaaaagta	atataagctt	tttttacatt	ttcctaaagt	cagttcctta	gatttttctt	4800
aagtacaaaa	tttgatagat	cttaacttgt	ttcttttttc	aaagcaattt	agcaaatatt	4860
at ttgaaact	ggagaaagag	atgccttggt	tactcaggtt	aaaatgctga	caatgagggtc	4920
ttaaattcat	gtcatccact	tgatctttga	caaaggagct	aaaaccatac	agttgaaaaa	4980
aagacagcat	ttttaacaaa	tggtgctggc	tcaactgtct	gtcagcatgt	acaaaaatgc	5040
aaattgacct	attcttatct	ccttaggcaa	agctcaagtc	caagtggatc	aagaacctct	5100
acataaaacc	agataccctg	aaatttataa	aggagagagt	ggagaagagg	cttgaacaca	5160
tgggcaaagg	ggaaaaattc	ctgagcagaa	caccagtggtc	ttaagatcaa	gaatctacaa	5220
atggggcctc	ataaaattgc	aaagcttctg	taatgcaaag	gacactgtca	ataggacaaa	5280
aaggcaaaca	gattgggaaa	agatctttac	caatcctaca	tccaatagag	ggctaataat	5340
caatatatac	aaacaactca	agaagttaga	ctccagagaa	ccaaataacc	ctattaaaaa	5400
tggggtacaa	gctaaacaaa	gaattttcag	ctgaggaata	ttgaatggcc	aagaatcacc	5460
taaagaaata	ttgaacattg	ttagtcatca	gggaaatgca	aatcaaaaca	accctgagaa	5520
agtgtattcc	tgaagtgtta	taaaaatggt	ccttaaacct	aatgacctga	ggagagtaat	5580
acagaaacat	ctggggaaat	aacaacatat	ttactattta	aaatactgaa	gaaaatgtgg	5640
aatattttaa	attaatttta	aaatcaccat	gtctatctta	aaatgtcatt	aaactatcac	5700
caaaggctaa	tggataataa	aaatgtgtta	tatgtatacc	atgagatttt	agacagaaaa	5760
aaaaagtga	ataatacaaa	ttttaggaat	gtgcatggat	ttaaaaaatt	atactcagac	5820
tggaaattaca	aaaatttcaa	agactggacc	aatagtcctt	attcagaagg	acaaatacta	5880
tataatatac	ctcaaataaa	gatgacaact	ttgagggttt	gatatgtgtt	taatatggct	5940
gcagagggct	gtttaagttt	atggaacttg	aaagtggtag	atgagagaag	gaaaaacttt	6000
taaagatgga	ggaagaacta	agacaatatc	tgagacatga	aagtggaaaa	tgtgtgtatt	6060
attggtgggg	aaaagggtaca	gccatggcat	ggggtgggaa	gagattcaga	gaaaagcatc	6120
aacaaactat	atgtaaaagt	gcatagtgga	gccaaccatt	tttaagccaa	taaacaccaa	6180
ataaagcaat	agtgaatact	ctacaaaact	aagtttctat	ttagttttac	tttcttcttc	6240
tcagtcaggt	tttgctataa	aaatattgaa	atatgccaa	tcctgtcaaa	gattaagtgtt	6300
attcagagag	cttaatgcta	taattctttt	caaaatttat	aatcacacat	atggccatat	6360
gtatacatct	gaaaaaaatg	ttcttgatta	taattaccac	tttcccaggc	ctccgtttta	6420
gaatttactg	tgtagctcac	aaatggaaa	agtaggtcac	ctcatgtgaa	aataaattac	6480
agagaacttt	cataagcact	gctactcaac	caaggggctg	gagacacgcc	atccagctaa	6540
aagtagacct	ggaaagggcc	ctcatcagaa	aacaacagag	gaaatgtcat	agagatagaa	6600
ataatttttg	agttgttcaa	agtcagacag	atatattgac	atgaagaact	ggtcatgtgt	6660
ttgtatagga	agaagtggaa	aatgatctag	cattcccaga	agctcatagg	gactataacc	6720
taatcacttt	ttattccctt	ttgttttttt	ttttttttta	atcaatcaat	tttttgttga	6780
tttcccagct	gtacttaaat	tgtttagaat	cagctcacia	gtaagctgtc	cttccaaaag	6840
tcagtcattt	gataaggctt	ttctttctag	cttgtctttg	acaaaatagc	tcattgacatt	6900
atagggtaaa	tctcttaatc	tcttctagcc	ttaaagggtt	ttgttgttgt	tgatgatgat	6960
gttgttgtta	attattaaaa	tttaagtatc	actcttggtt	tttttttcct	gtgccataga	7020
gatttcttct	aaaaactttg	ttatgaggtg	attagtaaag	cacatgtaag	ctagatgttg	7080
ttttacatct	agaaacaatg	gcaagagggt	tctcttctca	ttggtacaaa	gtagcatttc	7140
cttcatttca	agttgctaac	taaaccgcaa	tccaggctag	tctcagctca	ctgacattga	7200
aatgtgtcag	tgattaatgg	caatatgatt	atgttggtag	ctaggttttc	aaaccatcct	7260
agtcatttaa	attcataaac	tcactttact	tatttggctt	atgttacaga	ataatgaatg	7320

taggaaccaa	tgctcaataa	tgacaccaa	tgtgaaactt	caggttggtta	tgtctaatta	7380
tattcacata	tatttcattg	gctaagtga	tcatgaggtta	aaaccctaaa	tgatcaaagt	7440
agagaagttt	aagtgtgctt	tagtgaataa	tgacaaatat	tgacaggaag	aaaaaggtca	7500
ggacttaata	atgcaatcaa	agagatcctc	tgacattgaa	ataacttatt	cctacttagt	7560
gaaatatcat	atgctgtacc	atacaggaac	gcatttgaac	cagttttaag	gaacaagcat	7620
tggtagtaaa	agttcattga	gcccttgtct	agcatacaag	aatttctggc	tttggtttcc	7680
caagctttca	caaaaccaag	atatactagt	gcacacttaa	aatgtaggaa	atatgtcaaa	7740
agggttaagaa	atagctgaac	acattcagtt	tctgacctcc	aactcaaagt	cggttagagg	7800
ctaggataga	atgcatgaag	ccctgtcata	atgaaagaga	gagagagaga	gagagagaga	7860
gagagagaga	gagagagaga	gagagagaga	gagagagaga	gaaggaagga	aggaaagaag	7920
gaaggaagga	aggaaagaag	gaaggaagga	aggaaagaag	gaaggaagga	aggaaagaag	7980
gaaggaagga	gggaaaagtt	aataagtaca	tcatatatca	aaactgggtg	gtacctgtat	8040
acttgggtat	ctccatgaag	gataaatctg	gactagaacc	attaactgag	gatattgccc	8100
agaggacatt	tagagtagtt	ttgtaattta	ctctgcatgt	tacattttat	tttatattat	8160
gaatacatga	aaagctatga	aacagtgact	aaacttagtt	cattctatta	atatagacgg	8220
aaattgtgga	tgtcaaagtt	atgagacatg	ctttattttg	tacttgtttt	ggcgactatt	8280
tagtatttat	ttttattttt	aaaattaatt	tgtttacatc	acaagcacia	cttctcctcc	8340
ctcctctcct	cccagctctc	ttctcttacc	tcctttctct	acatccccct	cactttctcc	8400
tcagagaaaag	ggaagactcc	catggacatt	atcttgccct	ggcatatcaa	cttgagaag	8460
gactaagtac	atctcctatt	cagccttgag	aaggcatccc	agtcagggga	gaggagccca	8520
aaggcaggca	acagagttat	agacagctgc	tgctttattt	gttgtaaagg	accacatga	8580
agaccaagct	gcacatctat	tacatatgtg	cagagggttt	agatccatcc	catgcatgct	8640
ctctgggttg	cagttcaatc	tctatgagtc	attttgtgcc	taggctagtt	gaccctgtag	8700
gttttcttgt	agtgtctttg	atgctcttag	ctcctttaat	ttttcctccc	tatcttccac	8760
aatattcctc	aagtcgcctc	gatgtttggg	tgtggatctc	tctatatgtt	tactgggtaa	8820
agactctcag	aggacagtta	ttctaggttc	ctgcttatca	agaatagggt	ctctcacatg	8880
gcatgagtct	caaatagttg	gtttagtcac	ttagggcca	tttccttaat	ttctgtccca	8940
ccctttaccct	gtacatctta	tagacaggat	aatttggggg	tcaaagggtt	tgtgggtggg	9000
tttttgcctc	catccctcca	atggaagctc	caaaggagat	ggccatttca	ggttccataa	9060
ctctgactac	taggaatctt	agctggagtc	acctttatag	gttcttgggg	attttacttt	9120
tcctgggttt	ctagtttgtc	taagagattc	cccaattcta	ccaattccag	ttttatatte	9180
atctgtcagt	ctcatatttt	ctaccattta	tttcttttga	tttaacactg	tatcagggtt	9240
tccaaaatac	tgaagaatcc	tcacatttcc	ttgactacce	aagagtattc	gtagacttaa	9300
agtctcataa	ccaagaaata	aaaattaatc	acttcttatt	gtgctggatg	tttttttgca	9360
atgtagaatt	ttataatgaa	ttaaaactaa	gttacaaatg	ggctttacaa	athtagtgat	9420
aagggtgcag	taaatggtgg	cttttctatg	atacagccag	tcttaactgc	caacatatac	9480
attggataag	aatgtcttgc	tagttaaggg	ggtagagctt	agaagtaagg	ttcattttta	9540
gagtgtccac	caaagatatg	accaagaatg	atgaagcctg	ggaagacttc	tgtgagtga	9600
actacattgc	agttttatct	tgtcctatct	gttcaagtag	aaaattatct	tatgagtctg	9660
tgagaatctt	atcaacagcc	aaattaatta	ttcagtgtcc	cagactatta	aacaaaccat	9720
ttcttcccat	gagagaggtt	ccacaaaaaa	agaaaacaga	atcattttga	acccccaaat	9780
tatatgtcag	tgctctcaaa	catcagagga	gagacctagg	caaggtataa	tattactgca	9840
ttattgacta	gagtcaccat	agataaccat	gactgcaaaa	aataaaaataa	aataaaaataa	9900
aataaaaataa	aataaaaataa	aataaaaataa	aataaaaataa	aataaaaataa	aataaaaagct	9960
acaaggggca	agtaggatgg	gtcagaaagt	aaatgccctt	tgctgccaag	taccacaaac	10020
tgaattttga	ccaatgaaac	ctacaagatg	gaaagacaaa	ctgcctccta	caaattgtct	10080
tctcattttc	atatgaaaac	tatcacacac	acatacacac	agagagagaa	agagagagag	10140
agagagagag	agagagagag	agagagagag	agagagagag	agagagagag	accacccttt	10200
aaaatccaaa	agaaaagaat	gttgaaatatt	tctcaaaagc	aagatagcta	tatatacctt	10260
aatgtgaaca	ctagataaaa	tacaaacacg	ttgattgaaa	tactactttg	tatgctataa	10320
ttatatggag	attgtatagg	tcaatgatta	aaataaattg	tggggaaagt	aaaaagggaa	10380
atgaataaat	cgtaataaaa	caatttagga	agacgaaaaa	ttttctagtt	ccctagcatc	10440
ctgtatttga	gacttaagct	tggaaccata	tgaccctttg	atctgctctt	caatagtgtg	10500
tcaagctaga	aaaaatagga	acatgctaga	atttctgtgt	agcaagcccc	tgattcaggg	10560
tcttaaagac	gtctctaaaa	aaaaaaaagc	tgatttgatt	tatttaggaa	taagcatatt	10620

gtgtacattt	ggtcttagtt	ttcttagggt	ctgtttcatt	ataattgatg	aaattcattc	10680
attgtgttga	gtgagagtaa	ctgtagacaa	agataaaggt	gagacagcag	tgtgcatatg	10740
gtcttttgaa	ggagcccggg	gagtggcaaa	acagatgaga	tccctctgat	ccttcgggtc	10800
taatccaggg	cacattttag	aatatcttac	accgttccct	gccctatgcc	ttgacttctt	10860
atctttgcag	agatattttc	ctaaccagca	aaatggagtg	attgagctac	ctgtgtgaaa	10920
cattcctcat	aaaaagaagc	ttatatattt	ttttgttatt	tgttgttttt	aatctattca	10980
tttacttgta	ttgatttgaa	aactttaaca	atcccaggga	gcaaggaaa	tattagatgc	11040
acaacattta	aaaagtgtga	aatgtatatt	gagtaatagt	aagatttcct	actgtctcgt	11100
tgaatttaag	aataattact	ttcctggaag	aagcaattcc	cccaccctcc	ccaccccctg	11160
gaaactttca	gtaaaatggg	ctttggaagc	atcatagtca	tggacacaaa	gatttattta	11220
atatgttcag	tttaggtgag	taccatagtc	tttcaacaca	atcttggaac	caggaccatg	11280
accttgagct	tgaattatag	agaattacat	atccatattt	agcagatagt	caacgttttt	11340
gtttttctat	ttactagtat	tatcatgtct	tgaacaaccc	tttgttctgt	ctctcaccct	11400
cagtttttgt	tgtctaacaa	tcctcatagc	tctctctgat	aatgaaccta	aactttatac	11460
agttaggaaa	gatgtgacct	gatcatattg	ttatatttct	gatgtgactt	tgaaaagagg	11520
tcctcaaata	atgtattcag	cactggatat	gaatgatttg	tcagtgtgca	cattttttta	11580
attgattttc	ttattttttt	atgtgtatga	gtgcttggtc	gcataatagt	atgtaagtat	11640
aacacatgtg	tacctgagga	aaccagagag	aatatcaaga	cccctggaac	tggagtgtga	11700
gatggttgtg	agcattcatg	tgagctctgg	gcactgagcc	tgggtcctct	tcaagtgaag	11760
ggagtgtctc	taacactgag	ctatctcccc	agctctctac	tttgcaagtt	attattttta	11820
aagtatctgt	tttctggatg	ccaaacagac	cttttagtaa	gagctatagg	taaagacaaa	11880
ctccttaggt	cctccctcct	ctttccttca	aggcccactg	agaatttcac	tattaatcat	11940
ctgtgcatta	tctctatagt	gtctgectct	ttattaatca	cctccacgga	atctatcgct	12000
attaatcata	agtcttgagc	ctgcatatta	ccggttaatta	tctcacaatt	ttcgttacct	12060
cttggtttta	ttacttgttt	tccccaggga	atacaaacta	ttttaagccc	ttgactctga	12120
ggagtgtatg	tgtgtgtgtc	tgtctgtgtg	tccgtgtatg	tatgtgtgtg	tatctgggac	12180
aggttttaag	atatttcctc	taaaccctga	ttatcagtcg	atttagtaaa	attatttaag	12240
ctaaaagaatt	acaatgtacc	atcattttct	aaagcttaaa	gatccctttt	catatgaaga	12300
tataaagcca	ggtataatct	gtgatccttt	cataaattac	tgttatgtct	tcttcaataa	12360
ttctttgaag	gctttttaca	aactgggtga	tttagtttct	ccaggaataa	gcacactggg	12420
tcccttcagg	acgttatatt	gtttgggttt	ttattttttt	tcttttactt	taattcagtc	12480
gatacttggg	gaaattagaa	acaaatgaga	ccaaaattca	gaatcagtg	gatgaattct	12540
tattctcata	agtgtaacca	cacaacagag	gccttgataa	tctcagtttg	atgcaaattt	12600
aatcacaaag	caaatgcctc	tccatcaatg	ttatttttatt	tgcaaataac	agccactgta	12660
tatctagtac	aaaatagaaa	ataaaataaa	tgtccagttc	cctttgaaga	agatatctta	12720
ctacagtgtg	tgtgtctatc	atcatacttt	cagaaatata	attttgagaa	aaccaatagt	12780
ctcgaaagga	agaaagctat	ttttctaata	tcacacaccc	ctgattccat	tttcttccat	12840
agtagcttat	atgtgggtcc	cactaattca	ggaagcttca	ctaaggattc	taccgatgat	12900
ttacagttag	aattctagtc	taaatttgcc	tgacatcaaa	gcctgtctac	tctactgggt	12960
tatattaaag	caagcacata	aattgtacca	cttaatatata	acatgtaaga	aatgaaaggt	13020
agaacttaaa	tgtcattgtc	ctaaactagg	gatgcttgag	acacttgcag	ttgagttatt	13080
aagatctatg	gataccgtgg	atgtgaacaa	tatatagatt	agtatattta	tgccagcaaa	13140
tgtaaagccc	tctttttttt	caggtaccac	caatgtgggc	aggggtgggg	gagtaaacac	13200
atggatgtgt	tcttctgtcc	acactcctta	ttgacttctt	accatgtgtc	ttgagataac	13260
agttttctaaa	tgtgcttaac	gaagaaggaa	gacattttac	tgatggatgc	ataagatcac	13320
ctagcatacc	tctaagttgt	ggaagatgct	tctcagcatt	attgaatcca	ttttgtcagg	13380
gttgataagg	tgagtgtaca	cttccatata	atcattttta	tttatagagt	ggcatttcag	13440
ggttgtactt	taggagagag	agaaagcatg	atatgattca	ttaaagacct	tataacttat	13500
tttgagatat	aataactata	ctttagggtt	acatgtaaca	aacaatttcta	agcaagtttc	13560
tatatgcatt	ctcttagttg	actgcctacc	agctctatga	aatgacaact	gttactactg	13620
ctatcctata	aggaaaaata	agtgaagagg	agtttaattt	gagcaaagac	aatgggtttg	13680
ttaaatggaa	aggtaaagtt	acaagtatga	aatgtgaaga	tttaaataaa	agtgattcaa	13740
tgctactaca	caataatgga	ggttatagaa	attaattata	gtattatgta	ggtaaagaga	13800
aagttgaatc	aatgcagagc	ccaggataat	tgaaggtttt	tttttttttt	tttttttttt	13860
ttgagacagg	gtttctctgt	ttagccctgg	ctgtcctgga	actcactttg	ttgaccaggc	13920

tggcctcgaa	ctcagaaatc	cacctgtctc	tgccctcctga	gtgctgggat	taaaggtgtg	13980
cgccatcacg	cccagcagta	attgaaagat	ttaaaatttt	cttttgtaca	ggatatctaaa	14040
tgtagtattc	atcaagataa	gatataattt	gtcaacctgg	ggccaaatta	agttgttctg	14100
tgaataatct	tagatcaaag	actacatttc	atccatttcc	tcagaaatgt	gctttgagta	14160
tgtttaagga	tagaagactc	tatttctacc	catgggggta	taaaacacac	caagaactac	14220
atgtgttaaa	atttgtcttc	caaagactca	tgctattaat	tttaattaat	ttacttttag	14280
cctggatcat	aatgtctaca	ttgtaatatt	catttttcatt	ggctcttttag	ttgatgtgta	14340
cctttcaaat	ttctatgaaa	acaatttcaa	gaagattcag	tgaggatcta	ttatctgctc	14400
aatctattta	aaactcacag	tcaaatacaa	cataagggaa	caggactcca	cttgggacag	14460
gtcaatggca	gcatgcattg	tgctatgtgc	cttacatgag	agctaacatc	aaagctctgt	14520
cctgttattg	ggcagtcttt	tcttttcttt	tcttttcttt	tcttttcttt	tcttttcttt	14580
tcttttttct	tttcttttta	atattgcctg	gattgtttgt	cttgtgttcc	attccattgt	14640
tcctccatgt	attttttag	ggtgggggat	gatagttaat	ttgacaaata	agccactatg	14700
ataaaaaatg	acaggggaata	tccttccaaa	gtaattttta	cagtggagca	gctattttaat	14760
tttcacatca	cagttgagaa	tgctgaatat	tcatttcctt	gagttcataa	atctgaaagc	14820
acttttctcaa	ttgtaaaaaat	gtattttatac	aagagaagt	tcttagttag	ggtttccatt	14880
tctgggaaga	gacactatga	ccacggcagg	caactcttat	aatggcaa	atgtaattgg	14940
ggctggtgta	caggttcaga	ggttcagtc	attatcatca	agcaggaagc	gtggccacat	15000
gcagtacag	atggtgctgg	aaaaggaact	gagatttcta	tatctttttc	caaaggcaat	15060
gagaagacag	actttctagc	agctagaagg	atctcaaagg	tcaccccaaa	gtgacatatt	15120
tcctccacca	aggccacacc	tacttctaca	aggccacacc	tgctaatagt	accactccct	15180
gggacaagta	ttctcaaact	accactagaa	gtattgagaa	ttacatgtat	attgtaagta	15240
gttaatttgg	taaggagatg	aaaataaatg	aaacttttaa	aaaaaaaaa	aagagttcct	15300
ctaaatgcat	gctgttcaaa	tgactcagca	aattttggta	cttgctgcca	agactgaaga	15360
tgagaactca	gtccctaaag	cagatctctg	aatcccgtat	gtgtatacag	caaggatg	15420
atgtgcataa	cctcctaaat	atgtaaatag	atgacactga	tattatcaaa	taccaatagc	15480
caaatggaca	aatagcttgg	atcatgtgat	gctgataaat	gagataatta	gaaggactgt	15540
gaagaacttg	tattacaagt	gagacaggga	accattcaag	actcttgata	atggggctag	15600
tatcttgctt	ctactatttt	tggtatcttc	tagataccag	tggttagaat	gcattccacca	15660
tatgaaatgg	caaacaatgt	ctaggaggga	gatttataca	gtgtcagtta	ctgggtcaata	15720
ttattattta	cactacctac	atccatcagt	ggtttctata	tagaaacaga	aattacattt	15780
acagtccact	catctataac	ttgaaggaaa	gaaaaaggga	taatatgaaa	atgatagtac	15840
tttcatatct	aataaaacttc	ctatgtgtta	gcctctagtc	taggtgattt	gtgtattctg	15900
ttctggacaa	tctgataaag	aaaatacttg	ttatccttga	ttatagatga	catatataat	15960
tagcctaagt	taattccttt	ggcaaataat	atagaagaaa	taaaaaaatc	tcaagtattc	16020
taatttctga	aacttatttt	tgggggggtg	gcatttctcc	tccatcattt	tttcattctt	16080
ttctatatatt	ttcaagtgg	ataaaaattt	tcatatgaat	tttataggtc	tcaccataat	16140
atttacttct	acattcaacc	aaaaattcat	ttctcaagaa	ttaaataata	tgttttaact	16200
agattccaga	ggaaaacatt	gtctcgagca	tatgtggttg	tcttcttctt	cttcttcttc	16260
ttcttcttct	tcttcttctt	cttcttcttc	ttcttcttct	tcttcttctt	cttcttcttc	16320
ttcttcttct	tcttcttctt	cttcttcttc	ttcttcttct	tcttcttctt	cttcttcttc	16380
ttcttcttct	tcttcttctt	cttcttcttc	ttcttcttct	tcttcttctt	cttcttcttc	16440
ttcttcttct	tcttcttctt	cttcttcttc	ttcttcttct	tcttcttctt	cttcttcttc	16500
ttcttcttct	tcttcttctt	cttcttcttc	ttcttcttct	tcttcttctt	cttcttcttc	16560
ttcttcttct	tcttcttctt	cttcttcttc	ttcttcttct	tcttcttctt	cttcttcttc	16620
ttcttcttct	tcttcttctt	cttcttcttc	ttcttcttct	tcttcttctt	cttcttcttc	16680
ttcttcttct	tcttcttctt	cttcttcttc	ttcttcttct	tcttcttctt	cttcttcttc	16740
ttcttcttct	tcttcttctt	cttcttcttc	ttcttcttct	tcttcttctt	cttcttcttc	16800
ttcttcttct	tcttcttctt	cttcttcttc	ttcttcttct	tcttcttctt	cttcttcttc	16860
ttcttcttct	tcttcttctt	cttcttcttc	ttcttcttct	tcttcttctt	cttcttcttc	16920
ttcttcttct	tcttcttctt	cttcttcttc	ttcttcttct	tcttcttctt	cttcttcttc	16980
ttcttcttct	tcttcttctt	cttcttcttc	ttcttcttct	tcttcttctt	cttcttcttc	17040
ttcttcttct	tcttcttctt	cttcttcttc	ttcttcttct	tcttcttctt	cttcttcttc	17100
ttcttcttct	tcttcttctt	cttcttcttc	ttcttcttct	tcttcttctt	cttcttcttc	17160
ttcttcttct	tcttcttctt	cttcttcttc	ttcttcttct	tcttcttctt	cttcttcttc	17220

gttggtgttac	tttatagaag	cagtcatttt	ctctttgtac	aatattttta	attaattaaa	17280
atgggtttgt	tcttaaagt	aaaatttctg	ggaatttgtg	attttacatt	tatcacaaca	17340
tcccttggtc	agcatgctag	aagctttgaa	cattccatta	tggatgtttt	tattttttat	17400
tttttaata	ggagctttta	tatctcaagt	tcagtatgta	tctgaaaatg	gccttgaact	17460
tctcatccta	ttgcctacac	tttctgaata	atgggggtgac	aaagggtgcc	aaacctgctt	17520
tttgtagcat	tcagaataga	aaccaagtct	ttgtgcaggc	caattctcta	caatctgagc	17580
tataccctta	gattacaggt	gaaataatta	aagtagaaat	aatggtatta	tgcttgagat	17640
ctacacaagc	caagaaacta	gatttagctt	tctggttctt	attcctttct	tctccaagtt	17700
taaggctctg	cttttctttg	tttctaattt	gatggtctag	ttggtgttct	aattttcttt	17760
atctcatggt	tacaatgatt	cattcaatag	cactcattcc	tatgaaaaaa	caagactgtg	17820
agtacaatat	tgtgccagtt	ggcttttggg	taagaaaata	tttaaattta	tatatgctta	17880
tttggtattat	agattgtaac	tttattatga	caaagagaag	agaaatgcct	tggactggta	17940
ttctagaata	tcaattgaaa	ttagagatca	gaaaggtaag	aatgtctgca	tgaaataaat	18000
aatgataaaa	ctcactaaaa	gacacagatg	aattaatgga	ggaaatgaaa	aagagagaga	18060
atagaaaacg	gaaacaagtc	tttttaagta	tatatgactt	ttacagaaga	gtgaatgtga	18120
gctaactcct	taaggagaga	aagggaaaat	taattgtttg	tctgtctctc	taatccttag	18180
tatcaccttt	tgaatacaca	gaataagaac	aaagaaacaa	attatgtcag	aaaacaagtg	18240
actatttgat	gaagtgactc	catgagaagg	tcaatatttt	acgttcaagg	tctttttgac	18300
atagctcaag	ttactgttat	attgagttat	tgttatattg	agttatagtc	attttgaaat	18360
ttattttcca	tattttttgtg	tgttttctaa	ctttgtgctc	aattttcttc	tcaatttata	18420
tacctctct	ctttcactca	ctatatatat	gtaaatatat	atgcatatat	gtaaatatat	18480
atgcatatac	gtatttttat	atatgcatat	ataggtacgt	atgtgagcat	ttaatagtac	18540
tctcttgaac	ttgtattctc	atttacaata	ttgtgagtac	tagtttcaca	atttgatatt	18600
aacctactgg	taaaaacgat	ttgtatctga	gttcaactat	tctgctatgg	tgatgtttgt	18660
tgatccacag	ataaatttct	cagagaaaat	aatgaaaagt	gctttatatt	cacaaataga	18720
tattttatgt	atctagacag	cccagagggc	acatggctaa	tgatgaaaat	ataatcaaga	18780
caatccactg	aaactcagtg	ataatcatag	gagtttatag	cacctgacac	aagatagtca	18840
tgtagtacc	cagttctccc	acattggtga	gacatacggg	aacactggat	aggtgaggtt	18900
aagaacatag	gtttctgcct	agccctactc	tttaatttca	ataatgatgt	tgatagtggg	18960
tgattttcag	agatgcctcc	tggaaatcgt	tctatgtaca	ctatttttct	ctttgattat	19020
taatatattga	tttcttgatg	attttacttt	gtacaccctc	atcatctttt	tgtttgtttg	19080
tttggtttgt	ttgtttgttt	gttttgtttt	tgttttttcg	agacaggggt	tctctgtata	19140
gccctggctg	tccctggaact	cactttgtag	accaggtggg	cctcgaactc	agaaatccac	19200
ctgcctctgc	ctctcaagtg	ctgggattaa	aggcatgtac	caccatgcct	ggcaatacag	19260
cctcgtcttt	aaatagttca	gttcagtaaa	aaaaaaaaaa	aacaacatag	cattctgtct	19320
ttgacccaaa	accctctctt	tctcatctct	ctacttgtaa	tctatttgta	ttactgtgta	19380
gaagtatgct	ctagggtttgt	gcaggatgga	tttgtgtcag	ctgcagtttt	catgactatc	19440
ccctaaatat	gtaagtaaag	tcttctcaga	taaagtcact	tttttagtgg	gaaaaatcat	19500
actttaatta	atctcaagca	gtttgcttcc	cacggatcac	aaagaaatag	tatagatatt	19560
tctctccctc	cacaccttat	aattgctcaa	aatgaaggc	aagtttggtc	tggatgctaa	19620
atatgagtct	cttggtttcca	caagaatgaa	agaatgatcc	agtgtgcaga	attccaatac	19680
tatccctgcc	tcccggtgaa	agagtgatgg	aaggtgagcc	taaagaaact	gtagatcagc	19740
actgagcaat	ctgtggccat	atgctgcccc	ttgggtttgc	catatggctc	tgagtctaata	19800
ttcaaactcc	tctgtcagca	cattcaaagg	tgaagaatgt	agagacgaaa	gaaacaccac	19860
cataggggtt	gtaagtggac	agtcctctag	caggtgctct	ccagctgggc	tggggcagca	19920
gcagaattaa	gggtttgtga	ctgataaaaag	taaaacaaat	gcctgagggg	agaggagagg	19980
ctctggagca	gctgggcccc	cagtgctcatg	tcctagtttc	agagccccaa	agtacccaag	20040
gggtgtgggg	gtgtgtgtgg	agaaaaacat	cgagaatatt	ctattgagtg	atcacaaaat	20100
gagcattggt	tttattttct	cttagctatg	tcacttttga	acttagcaat	gtagctttat	20160
taaatacttt	ccagtgtttt	gtgtatatatt	ttgaaatttg	aacatctgtg	catcattttt	20220
cccagtcttt	tcttttagag	attcccatat	tcttctagtg	tgtatggagg	gaaagcagag	20280
actcattcat	ggaatttagc	agaatttgat	aaataagaca	atttactaat	gccctcatta	20340
atttccttga	aaaattcatg	tcattacaca	gtgaattatc	tggttgtgtg	ctattcacaa	20400
tgatgtgtaa	cagtatgacg	tgcaagtcta	gcacagtgtt	gcatcagact	atttctaaga	20460
atatgccttc	agtcactttc	ttaaaaaggg	gatgcgtagg	tcatgcaaaa	ttgagaaaaa	20520

caggagaaat	ataatgggca	gtattcacgg	caaggaacag	ttgtaaagag	cacccccctt	20580
gtttaataca	aagtgtctta	agcacttatg	ctgggcagac	acaactgaac	attctgtctg	20640
gaactaagga	gtagcagaca	caagctgtgc	taacttatat	attactgacc	aatgtataaa	20700
atgagacatc	aaccaattac	tattgtttta	taaagttatt	gccataaacg	ttgctactga	20760
attcctccaa	ggtatcaagc	actgtaatgg	gcatgcagta	tgaagaggca	gtgcagattc	20820
agctgttatc	ttggaggatc	tgaaagtcta	gtgggtagag	aaaagttttc	ctaaaacagg	20880
acagatatct	gttgtgtaaa	tgtaaggta	aagtggatag	tacctaaactg	gggaggctgc	20940
acagtgttag	tgaattcaaa	ttaagtgtta	gtgaattcaa	attcttagtg	tagggacttc	21000
cacagcatatc	aaatattgaa	tcacggcata	gtaagtgata	ggagattgga	aatgagagca	21060
taaggacaca	agataatatc	atgctttaaa	attgtaggag	aaacactgag	gccggtgctt	21120
acttcaagag	accgaaatac	gtatcaggaa	gtgatttcca	cataggccag	tgaattatgt	21180
agaactgaga	acaacacttt	gaatggaatg	aacgttttct	tcattcacac	cagggattca	21240
gttttgctct	tgccatagt	atatgctctt	aatcttctac	ttcagacctt	ctttgccttt	21300
ccctttctct	attctctatg	accacaatac	cacaggcaag	gtgaggaagg	agactagctt	21360
atggcagtg	ccccaggaa	agcacatctt	tctgtctgtt	tagccagtgt	tttcactttt	21420
taaaaaaca	cttattgttc	tctatagaca	aataattctc	aattgaatac	agcatgttac	21480
tgattgtaag	tcatactttt	atttaccaca	aagaaaaaac	taaaaccctt	gtcacttata	21540
actgcaatgc	gtcatcagtc	agaaagccca	ttgtgaactg	atgtatgtta	gtagattgga	21600
aggaatcagt	taaagttcta	atatatgaca	agctgcagga	aacattctgt	accagactgt	21660
actgtggtta	tttattctca	cagtctctta	atcaccatga	aatgggcaaa	tacaggctgt	21720
aaaattgtgt	tatttacact	tcagtgatgg	aaataaatgt	tatgttactc	atztatagta	21780
tatcattggc	attgggtagt	ggattctgca	gtttatgaca	atctctctct	cgctcgctct	21840
gtcgtctgt	cgctctctct	ctctctttct	ttcatatgtg	tgacacacct	ctgtgtgtgt	21900
gtgtgtgtgt	gtgtgtgtgt	gtgtgtgtgt	gtgtgtgtgt	gtgtgtgtgt	acttcaagtgt	21960
agatgggagg	taaaaagggt	aggaaatacc	catttataac	taatgaagtc	ttaggacagc	22020
ctagagccac	agaggggagag	atgcacatca	gtggtgacag	agtaaacctta	gttacaataa	22080
tgggtgtgtt	tccctcctcc	tttcagatat	tgcaaaaaac	cccaaggcta	tgtatcaaat	22140
gtagtaaac	aattaaataa	aaagactctg	atcatgaatg	actcctaact	tgtttgcaac	22200
caataatgat	cttactgacc	acttattgag	caagaaatat	gtatcgtgtt	atgtgtgtta	22260
tgtcaccata	gaaattacat	taatttaaca	ctggtcttat	gtggtgtact	taacttttta	22320
ctaaatggtc	agtatctgac	aactttgacg	agatggctcat	ttgtttctgg	ctaagatggg	22380
actcttcctt	tgactaagtg	attgtaggtc	ttctgttgaa	cctgctgcac	aataataatg	22440
tagaaaacta	aatggcttcc	tattcagctt	actctccatt	gtaggataaa	aactgacatc	22500
atgatggtag	ctaagtatca	attttttact	cattgcaaaa	ccacatttgc	atgtttattg	22560
aggttttagca	aataaaacat	tactgcttac	ggcttctctc	ttctactttg	tacttggttt	22620
gtcttctaga	agaggctgac	agaactttta	tgggtctggtt	aaggtcacca	catgctagtgt	22680
tattgttatc	atgttggttt	cagaaaaaga	aataccacac	caaagcactc	tcctgaatat	22740
tcctatcata	ggtatgaaag	ctctcaatga	agatgtatat	aaaatgtgtg	catcaatacc	22800
tcctgagaca	caatttagaa	gagattatct	gattctttct	ctgaggcttc	tttttacctg	22860
ttcttccctt	tggtagcaag	aaaggacatg	tgcactctgg	gcgtggatgt	acttctcagt	22920
attctgtcct	taattatcac	actagattat	ttttcttttc	ttttttttta	tttttctttt	22980
taaaaatctt	ttattaggta	ttttctcgtt	ttacatttcc	aatgctagcc	caaaagtccc	23040
ccatacccac	ccacccccac	tccctacccc	actcattccc	cctttttggc	cctgggtgttc	23100
ccttgtagctg	gggcatataa	tgtttgcaag	tccaatgggc	ctctctttcc	agtgatggcc	23160
gactgggcca	tcttttgata	catatgcagc	tagagacaag	agctctgggg	tactgggttag	23220
ttcataatgt	tgttctacct	atagggttgt	agatcccttt	agctccttgg	gtactttctc	23280
tagctcctcc	attggggacc	ctgtgatcca	tccaatagct	gactgtgagc	atccacttct	23340
gtgtttgcta	ggccccggaa	tagtctcaca	agagacagct	atatctgggtc	cttctcaggg	23400
aaggctggcg	atctaagcac	tattactatt	gcagcaaaga	catactctac	ttgggtatgca	23460
ttacagacat	tgattggagg	atgagggggg	ttaggaaagt	taagatttca	gaagatgaca	23520
gtctagattc	tttaagtcta	ttttacaatg	tttttctcta	gcctaggcca	agagacatag	23580
tcagtgagga	atttcatttt	agaattatct	tacatttgaa	gtttctagaa	tttggcacia	23640
tttctaaatg	tgtagtgaga	taaatggatg	aggaagggat	taactttaaa	aagctagatt	23700
ttgattttgt	cctttaattc	attgattgct	tgtttgtgtc	tgtcatatcc	ccatgtatgt	23760
acttagattt	atgtatctgc	atgtgaagga	taggaggatt	tcggtgtctt	actgtgactt	23820

tgtactttat	tccctaggaa	gaggggtctct	tactgaactt	gtatgtagac	ttgtggccaa	23880
gaagctccac	agagcccctg	gaaaggagta	gctgagagaa	ttctaacctg	attgatgggtg	23940
atctagactt	ttgcagcttt	gttgtagcta	aaatacatTT	gaggttctta	tgacacacct	24000
tgggggtatc	gactggacta	gtgatgttta	tccttctatt	catcagaaac	ttatatgaac	24060
ttgctttttc	tcaggcatgg	ctctaacagc	tttacaacta	ctctttgagg	aagtatgatt	24120
atccttataat	tgcccacatt	ttatTTTTat	aattgccata	gttgtctttt	atgggatata	24180
atgaggatct	gtgctatgat	taatttaatt	caaccacaca	agatagataa	tcttctattt	24240
atTTaaagat	TTTTcttttt	atTTTcatTC	atgtatgagt	gtttacctac	atatttTgat	24300
gactatcaca	tgcagtgtcc	atgcgagtca	gaggagagaa	atagattccc	tggaattaga	24360
gttacagatg	gttgtgggat	agcatatggg	tgctgggaag	caaaccctt	tctttcagaa	24420
gagcagaaat	gactcttaat	tgatgagcta	tcttcccaac	tctatacctt	cattctcata	24480
gtagcaaatg	gagaactggc	ttgtatagct	tgactgctgt	catgcatctt	TTTTTTTTTT	24540
TTTctcttca	gaggcagatg	gatctttgaa	tcagaacaat	gaagggaccc	agtctctcca	24600
tggaagtgga	gactgtacat	aatTTTgcag	ggggcttggg	TTTTatatgg	tgaaaagggg	24660
gatttggggg	tagaagtttc	ataatgcagg	tcagttctcc	tgaagtctca	gtggagggtg	24720
gaggttgctg	gtattttcat	cttcttatca	gaagcttccc	tgggaagcta	ccacatgcca	24780
gcagtcacaca	gatgatccaa	gcagaatcac	atagccttct	aagtgtatgt	attctaaata	24840
ttagtattta	gatatgtcaa	ataatgtaaa	tatgtaaaaga	aggagggagg	taaaaactgt	24900
tctcaggttt	acagggctga	aaatgaggct	caggaaataa	aatcatttgg	acaaggtgat	24960
ctgggtgttta	gtcatctgac	ctgaccttta	cttcagcaac	ttctgattcc	cttcactact	25020
tcttcactag	cagtgtcaca	tgtagaatta	tgtactgttc	cctaaaattc	ataggctgtg	25080
cctgtttctg	tgactgcaat	ttaaaaattc	atctcccagt	gccatgtcct	atgacttgaa	25140
TTtaatgaga	taattaaagt	aaactaatgt	cttatgggtc	tgcttataa	caatataact	25200
gattatttta	aaaaaagagg	tcaggggcca	gggagatata	tcagttgata	aaatgtttca	25260
aattcatgaa	gacctgcaga	tcctcagtaa	cagcatttaa	aaaaatgaaa	ttaataaacc	25320
aataaaaaagc	aaacatcgta	aaaaaacaac	atcacaaaca	acaaaaaccc	gaatgctgat	25380
atctataatt	ccagcactgg	gaaaaggcta	gctacaggtg	ggagatctca	aaacttaact	25440
gatcagtcag	tatagccaag	gaatcagtac	caggttcagt	tagagacctc	ggctccaaaa	25500
caatggtgga	gcctcttgag	TTTctccac	agctcacgag	cctgctccta	tctttcctga	25560
acgttctcct	TTtaataata	aacactatga	tcctgtttcc	aataataaat	agtaattaat	25620
aataaaaagaa	gattgagaac	tgagaactgc	agaaggcact	caatagtga	ctctggcttt	25680
tacacacaca	cacacacaca	cacacacaca	cacacacaca	cacacacaca	cacacacaca	25740
cacacacgaa	atatacatcc	cccccgtaga	cgaatgaaca	cgtacacaca	taggtaaaag	25800
aaagcatcat	gacacaagac	acggcaactg	atgatatctt	catcctgggt	TTtaatctct	25860
agcattgtga	gaaaatatgt	tcctctagtc	tgaaacatcc	agtcccta	actgtgctct	25920
gggagacttg	ggagtctaac	tgaagcagta	agcatcctct	gttgaaaata	aagaaggaat	25980
gaggatgttg	ctccacgcca	gttccctgcc	ttcaccaagc	ccagagggtca	gatgacttcc	26040
tgggatgaaa	gccagcttcc	tcttgctgtt	cctccagtcg	gtcagcaaac	gccttcttcc	26100
tgttctagtc	ttcagtcttc	taacttccct	cctgcgacgg	ggcagatcga	ttctagaaca	26160
aaaccaaag	tgagaatgct	aaggttggca	ctctcacttc	ctctttgaat	atagtacttg	26220
cagaggggca	ccactggga	gggaagaggc	aggtgtccca	gggactctgc	gctgccacca	26280
gttacagatc	gtcatgttct	ctcatggcct	ccactgggtg	cagaaaatgc	caggatgatg	26340
cctccctggc	tcctggctag	gactctgatc	atggcactgt	tcttctcctg	cctgacacca	26400
ggaagcttga	atccctgcat	agaggtatgt	gtcttgatcg	catgtgatca	caccctttcc	26460
tgctagcctg	ccttgtttct	caaaactatc	cacagctcag	agctccctgt	gtgtgctctg	26520
cttagtttat	TTTgcacgaa	ggagttaa	taaccaa	cttgagaagc	cttggcaaca	26580
aaaagcctca	gtgttaacac	agggcaggaa	caggcagcca	gggggtgtctt	gtttcattta	26640
aggcgtctga	gtcatgattt	agggacttga	aattagtaaa	actagtttat	agtcattgtt	26700
ctgtgacata	cctgagagtc	gttaaagaac	ttactgaacg	tctctgaggc	cagtattcac	26760
gggacgaaag	catgactgta	atcactgaaa	aatgtaagta	ggctgtaatt	tcagggtctt	26820
ctgtgggaac	tctggccact	cagcttttag	cggtcattcc	ttccctttcc	aaatcaagtg	26880
aaggtagctg	tgtcttttct	gctgctttcg	aagcatcttt	gagatgcttt	gagtggtagc	26940
tcagcaggta	aggtcagtgg	ctgccaagcc	tgatgaaaat	ctgagttcaa	gcctcaagcc	27000
tcacaagtta	gaggcaggga	atctcctcct	TTaagatgtc	ttctcacttg	caagtgtctg	27060
ccttggcagg	tgtgtatatg	catgagcaca	cacacaaatg	aataaaggga	acaattgtct	27120

taaatgaaag	aatttctatt	aaaaataaaa	acaacaaaac	acacaaaaac	acaaagactt	27180
ttctaagtga	tttttagtatt	ctgcaactaa	ttctaggaga	taaagaaatg	ggaggggtga	27240
gggaaggaga	gggacagagc	aacttaaaac	atcaattagt	tactgctaag	gcagtaactc	27300
ccgttttggg	cgaatactga	gtcgtgagta	atctgacca	tgactcattc	ttgttttcct	27360
cctgcacaga	ccacgcaatt	atcttagaag	ctcacaatag	aactgagcaa	acaaggaagg	27420
aattcggggg	gaggtaggct	cagaagctca	aaactgggtc	aatgagttaa	gatacatgac	27480
attcacatgg	ggaaaaatac	tgtaattttt	aaaaagttat	aatcacagta	tcttgctttc	27540
tgattcctca	gttatgttgg	cagagatgga	atttccaatc	agtgtacac	tgagataaaa	27600
tcccgttgct	cttgggtgtc	ggtgtgcttt	gtcaactctc	aaagcttgct	tgttccttct	27660
gtaagccagg	tctcagggcc	cttggccttg	tcttcaggag	tgattcctga	ctggtttcct	27720
agttcatatt	cctttctata	cccacacaca	gtttcttctt	tatttggtgt	tattggtcca	27780
ggggcttaga	tttatcaaac	tactccttta	tactcttaat	aactccttgg	aaccatgatg	27840
gttgcttcat	cctacagggc	cttagcactg	cctaagctaa	ctacacacac	catcatccct	27900
cacctaggtc	aaggctcacc	atgctaaaat	tatggaatcc	ctgtatatag	tttaaaactt	27960
cactgttgat	caaattgaaa	aattaagaat	aaatgcatca	aattagtttc	aatgattttt	28020
atgcaattaa	atatagttat	gatgcgtgaa	atataataaa	agcatcccac	actaacactg	28080
gctaagcact	agcctcaggt	ctgtctccag	ccctatggac	aggccgagga	gaacatgttc	28140
tttcctttag	ccagggctctg	tctcacccat	gcctgctctg	tgtctccaga	gctctgaaat	28200
tgctcttttc	accaggctcc	ataagttacc	atggctggct	gatgccaaag	acgccccaca	28260
tttccaaatt	cctgcagctg	gctgggggtg	actttttttt	tattagatat	tttctttata	28320
tacatttcaa	atgccaccct	gaaagttccc	tataccctcc	ccccaccctg	ctccccatc	28380
caccagtc	cacttcttgg	ccctggcggt	tcctgtact	ggagcataaa	aagtttgggc	28440
ctctcttccc	agtgatggct	gattaggcca	tcttctgcta	catatgcagc	tagagatacg	28500
agctctgggg	gtactgggta	gttcattttg	gctgggggtg	actcttgcac	accacactct	28560
accaccatac	ttttctctgg	agcccagttg	agttgccatg	tgaaggaaaa	cacaacacac	28620
acttgggtcta	caatcaacag	gtaacacaat	gttgggtgca	gaacctagca	tcctaatttt	28680
tttttattag	atattttctt	aattttacatt	tcaaattgcta	tcctcacagc	cccctatacc	28740
ctcccccttg	ccctgctccc	caacctacc	actcctgctt	cctggctctg	ccattccctt	28800
gtactggttt	tgtaaacctaa	tctatgttaa	aaatcctccg	actcaggagc	ctcttggtct	28860
tgtggagact	tgaggaccca	ggatagggga	acactaggct	gttaaggcag	gagtgggtgt	28920
gaggggtgagg	gagcaccctc	atagaggtag	gggggtgggg	gacggcgagg	gggtaggggg	28980
cttgtggagg	gaaaaccggg	aagggggata	acatttgaaa	tgtaaattgag	taaaataacc	29040
aaaaaacaaa	caaacaaaat	cctcaggtgg	cagatccttg	aggatccacc	acttgaattg	29100
acagcctccg	actatctgca	atgtgcctct	aatgctctca	gccatccaca	aagagacctt	29160
ccttactcct	gcctccctct	tcctcttctt	cttcccgact	cggaagtccc	acctactcat	29220
ctagtgattg	gtttcctgta	atgtttatta	gggggaaatc	ctaccacata	gttaagcaat	29280
tacgaagata	ccttatgttc	aatttttgat	acaggaaatt	agacattcag	caacattttt	29340
gttttactgg	acattttgat	ttctcctatg	cgtgtttcat	atttcatagc	tatgtgtggc	29400
ttatagctgc	agtactctaa	tgtggagctt	tgatttcagg	attatctttt	tcattttatg	29460
tagatttctc	tgtgaatgtc	tcctcaggtt	gatttttctt	gattgcctca	tgtacatttt	29520
cccccttacc	ctctccatat	gctctttcat	tgatcataat	attttgtatg	tttgtctttt	29580
atttttccac	cattttattct	cccccttggt	tagaataaac	aagaaggagg	tattactgct	29640
gggtttgtta	gcatgtcacc	aatgcctctc	agtgggtaac	gctaagaccc	tttagtacag	29700
ttcctcaggt	tgtggtgacc	ttcaccata	aaattccttt	tggtgctact	tcttaactat	29760
aattttgtta	tggtgttgaa	cgataatgta	actatccctt	atgcaggata	tgtgatatgt	29820
gatcctgtaa	atggattggt	tgacccttaa	atgggtcaaa	gtccacagg	taagaaccac	29880
tggcctagat	catgatagg	cttcagttgt	atgtgtagta	tgtgtgaaac	cagtgaagaa	29940
atgacttctg	aacaccatct	gatgtcctcg	tggtctgcct	gtggcttctc	catgacagaa	30000
ggctctgcca	gtttgtctac	atgtgttccc	actgtgtatt	atgtgttatt	gttcttttct	30060
ccttttgaca	tacatatttt	ttcctttacc	acacatttcc	ttgatcagct	ttccttctga	30120
atctagaatc	tgtgtctttg	caactttcgt	agttcttatt	catgttcttc	tctgttagct	30180
ggttctatga	gtgcagtgcc	atcagaaatc	atgtaacatg	tattcttgta	ccaccatgg	30240
ccttttagcag	aaaaagccta	ctatttaact	tatacgggct	ggtgtcccac	caattacaca	30300
atatttatca	ttcattcatc	caacaaatgt	ctattgagca	ttgagaggct	accatgtacc	30360
tttctgagcc	ttgaagataa	atagcaaaca	aaaatcatca	gagcatcaat	gctcatgggt	30420

caattgataa	atgaaaagca	tctggaaaat	aactatatag	gcaagagatt	taccttgtca	30480
tcaaaatctg	taaaggaaac	aaaagagggg	gagagaagaa	tttctgtctg	atgccttact	30540
ctcttagata	cattgccttc	aaggatccga	tgatgagtag	catttaggga	gatgtgtgtg	30600
aagaagcctg	tttatgtatg	aatcttctga	ctatatgtgt	attacccac	ctcttttatt	30660
ttctttgtct	ttagaggatt	ttttgaagat	tagtataaaa	tacataagtt	gtaagtaaat	30720
gctaatatgt	agcaaggaat	gaatagtaac	caatgataat	taacattaat	atztatcact	30780
ttaattaatg	caagctttga	gataagctct	gatctcattt	agccctttga	gaattctatt	30840
gcttttaaat	aagagaaaac	aaaactcact	gggttaagca	aagcattttg	ccagatgaaa	30900
tcatataatt	atgatattac	atgaaatggt	atggatatagg	gttcacaata	aatgtgagaa	30960
aacagataaa	actagtggag	attatgatag	agaaaacact	caaccctgag	tacaattttc	31020
taccactgga	atccatgcac	tataagacag	cctctgatcc	caggaccaa	ctgagaaagt	31080
caatgaatct	aagaacaaaa	ataattgtca	aaaaataagg	cagaatctag	gaaatgtctg	31140
tatatTTTTA	ttgggtactct	ccatgtagct	gtatataatg	aaaatgatga	attagaacaa	31200
caataatTTT	acataaaaagt	atataacaagc	atacattaac	atggctttta	catacaacta	31260
gcgagggttca	cagaagatat	tataaagtca	aaccagcaca	caagcaaaac	tttgtccac	31320
actcagtatt	cttttagttct	ttgtgtagtg	ttgaagactc	ctgcacatgt	gtagctgttg	31380
gccttttaca	tctcatgtgc	aggcagccat	gtcagtga	ctttatgggt	gtagcttttg	31440
acattaagaa	tcacagtatc	acagtaaagt	tcgtaacctt	tggactcata	atctttcgtc	31500
ctcctctcag	tgatccctga	cctgtaggtg	ttggagttgt	attgtaagtg	cttccattgg	31560
cactggactc	cagaattctg	cattttgggt	ggttgtgatt	tttttgtcgt	gatctctgtt	31620
tataaagtgg	gagaaatagt	ctttcccaag	caatagcaca	gcaattagtt	accaaagcc	31680
aaatggccaa	ccctgaaaac	atatacataa	gtaatattat	acaaactgaa	caggttctac	31740
ttatatatgt	gggattttat	ttatacaata	tacaatatat	atatatcaac	aattaatgaa	31800
gcgggcaaca	cggacttgaa	aaacagcaaa	gacaagggag	taagaaaaaa	actttaagag	31860
tggaaaagga	aaagtgaagt	gatataatta	taatttcaaa	taatagtaat	aaaaaagatc	31920
tactctgtac	caagtggcac	acaacacttg	ttatgaaatt	aaggttttca	gacttgagag	31980
ttatgtaaca	cctgattcta	ttgtttctca	tttaatacata	attttgttgt	agcagaatgt	32040
taacatatgt	agaatttcagg	ggatattttt	tcttcctgat	atgtggaata	agatgtcttg	32100
caaatatgaa	gaggcagata	aataaatgga	gaaggatggg	tgtgatacca	tatcccaga	32160
atggcaggta	ttttgggagt	ccaatgttat	ctttgactgt	atagctaatt	taaggccaga	32220
ctgggtctata	ggaaagcttg	tttcaaccaa	aataaatcat	gaacgaatga	atgaataggt	32280
ggacaatatg	ttgagtggca	tgtacatgtg	agagttttat	caccccat	ttcatctttg	32340
gagaggagtg	ggaacacacg	gttggaacaa	taacaattgt	tgtgtggtat	ttacaggtag	32400
ttcctaatat	tacctacca	tgcattggatc	agaaactcag	caaagtcctt	gatgacattc	32460
cttcttcaac	caagaacata	gatctgagct	tcaaccctt	gaagatctta	aaaagctata	32520
gcttctccaa	tttttcagaa	cttcagtggc	tggattttatc	caggtaatga	atgagctttt	32580
atgtgatgca	gaatgtgaag	tagttatttt	ttatatcatt	gcattcttgg	cttagaaaac	32640
caaggtgggt	ctaactaaac	ttccttctgt	catctattca	gtagtgtctac	aacttgctgt	32700
aaatccttgg	aaaagctact	tttatttaac	tggtttcagt	tggatgggcc	actagataag	32760
aatatctaag	ggcaattcta	acctctacat	tattttaa	aatttcatta	gatatttatg	32820
aacctgtct	tatatgttgt	atgtctaaac	tacagaagaa	gaatttatag	atacaaaacc	32880
catactccta	attattaagc	aggataaaat	cctctttaac	aaataagtaa	gttaaagtct	32940
tgtccttatt	attgaacata	cagcaca	aaaataaatg	ttaactaatg	ctaatactgt	33000
tgtttataac	agtaagta	aaaatatgtg	aaaataaggg	caacacactg	tgtcctatag	33060
aagagtgaat	gttttgttat	gtgtgtgaga	ggatcaggaa	agattttgag	acatgagtag	33120
atatgtaaga	tacctgaaat	attgaaagta	gaaaagagag	tagagattga	aaaaaaaaact	33180
aacttaggag	ggagatgtaa	atgtccaagt	aaaacatcaa	ctatgggcaa	gaaacagtta	33240
ctaagattgt	cctttctgat	tcagggcatc	ttaccatttg	ttggaacata	aaaactttta	33300
gccagtattt	caggcgggaa	gctcaatata	ttttattgggt	taaaattgct	ctttgacaat	33360
ttcatacatc	tatgtaatgc	atacagctac	tcttaccttc	acccacactg	agttttctct	33420
gatcactgtt	agctctgacc	ccttccaaaa	tgtctccaac	ctatattcat	accttcttat	33480
ttattgtttg	accactgat	tttaaccagg	ttctctgtgt	gaccatagat	ttagaaaaac	33540
ctatctgaga	ctagtgaggt	taaccatttg	ataagcaact	aaaaccagtg	acggtttctc	33600
cccaaaaatc	taaacttttg	cagagaagaa	atgattccat	ggtccctcc	atgatcagta	33660
aatatctatt	ggcatgatca	gtgcagggaa	ccacagcttc	tatgacatca	gatttgcaaa	33720

gtctttgtca	tgtcccat	gtccctcatg	tcccacaaat	ccctcctctc	tctgtctctt	33780
ggctcttaca	tttctatcag	attcctcgtc	ctttataatc	cctgactctt	ggagagggat	33840
ttgtgaatgt	tcattacagg	ggtgatcaca	gaactatgtt	ttgcttcttc	tagcatcttg	33900
tacatctaag	aatatcctca	ttcactactg	tttactataa	agggagagtga	catttggttaa	33960
ggggtataaa	tgtaaatatt	tagacagaag	tctggtacta	tgctaattta	actaaaccac	34020
aataaccaat	gccctctctg	caccccaaac	atcagggtca	taggcctctc	taagcaacat	34080
tttttgaaca	ggttaacagt	actagccttg	gacaaaaatc	taatccaaga	aagctttgtt	34140
actcctaaaa	tagttatgcc	agaatttcag	cactggacac	atcttgccctg	gcagggttcat	34200
gtaatagttc	atctggggcca	tagctggaag	agaccagtaa	tgatttttcc	ccaccagcct	34260
tcatgacacc	tttctgctga	aagcaaataca	gcagagagaa	cattgggtgt	gcttcagctt	34320
catgtcagtg	ggttgtactg	atcaaggaga	tccttaggtg	ttgaagttga	acgatgaacc	34380
tcttctctac	catattccta	aagctactgg	aatgtttcac	acatgtgttt	ttgttctaaa	34440
atthagagta	tggtattaaa	agtcttctgc	agagcagaca	atactgtaaa	tcattagtga	34500
actagaaaat	gtattatact	ctttacagga	gcatgataga	tggagaattc	caaaggaaga	34560
ggaccacagc	tctgttgggtg	gagcctgtgc	tttctccaac	gttttagcacc	atgtgccctg	34620
ttgcttgtaa	cttttccctga	gtctctgtct	tctctcctag	taaaggaaaa	tggtaaatct	34680
ccctccatgg	tgaaaagtta	ataaatgaga	gattattaaa	attatttagt	gagtttatga	34740
gtttgaaaac	atgctatcat	aatcacttta	ttaaattgta	cattctactt	atcccagggga	34800
gatagatttg	aagagaactg	aggtaagcag	gtaaaaaact	ctaaacagaa	taatctcttt	34860
ttaatataga	gaacatagtt	tttcacccag	tataattgag	aattgatcta	aagtataatg	34920
taagataatt	ccttaaagggt	ttggagtttg	tattcaggaa	aaaggtaagt	tcctcttccc	34980
ttagctcaca	ggatattttg	cattagagca	aagcagacaa	tctactcctg	tgcttttctt	35040
taaaaaaaaa	gataattttt	attatgtaat	ttcaaatggt	gtcccttttc	ctggtttccc	35100
cccctgaaaa	cccactatct	tcacccctc	cccctgctca	ccaacacacc	cacatccact	35160
tactggccct	ggcattctct	tatgttgggg	catagaactt	tcacagcacc	aagggcctct	35220
cctcccattg	atgaccaact	aggccattct	ctgttacata	tgacagctaga	gccatgaatc	35280
acaccatatg	ttttcttttg	ttagtggttt	agtcccagg	agctctgggg	gtactggtta	35340
gttcatattg	ttgttcttcc	tagcactgca	aaccccttca	gctccttggg	tactttctgt	35400
attttattca	ctggggaccc	tgtgctccgt	ccaattggatg	gctgtgagca	tccacttctg	35460
tatttgtcag	gcactggcag	accctctcag	gagacagcta	tatcaggctt	ctgtcagaaa	35520
gctcttgttg	atatacacia	tagtgcctca	atttgatgg	tgtttatggg	atggatcccc	35580
aggtggcagt	ctctggatgg	tcatgccttc	agtctcttct	ccacactttg	tctcggtaac	35640
tcttttcatg	ggatattttg	tcccacttct	aaaaaggatt	gaagtatgca	cactttggcc	35700
ttccttcttc	ttgagtttca	tgtgtttttt	gaattgtatc	ttgggtattc	tgagcttctg	35760
ggctaataatc	cagaattaag	tgcatatcat	gtgtcttctt	ttatgactgg	gttacctcac	35820
tcaggatgat	gccctccagg	tccattcatt	tgcttaagaa	tgtcatagat	tcactgtttt	35880
taatagctgc	atagtactcc	actgtgcaaa	tgtaccatat	tttttgtatc	catttctctg	35940
ttgagggaca	tctaggttct	ttcaagcatc	tggctattat	aaataaaaact	gctatgaaca	36000
tagtagagca	tgtgtcctta	ttacaagggtg	aagcatcatc	tggatatttg	ccttggagtg	36060
gtattgctgg	atcctcaggt	agtaccatgt	ccaattttct	gaggaaccac	caaactgatt	36120
tccagagtgg	ttatatcagt	ttacagttct	gccagcaatg	gaagagtgtt	cctccttctc	36180
tacatcttgc	gagcatctgc	tgtcacttga	gtttttgatc	ttagtcatte	tgactgggtg	36240
gaagtggaaat	atcagggttg	ttttgatttg	catttccctg	atgactaagg	atgttaaaca	36300
tttttttagg	tacttttccag	tcattcagta	ttcctcagtt	gagaattcct	tctttagtct	36360
tgtaccccat	ttttcaatat	acacaatcat	aatcatatat	gtatgtatat	gatttggcaa	36420
tagaatccta	acagaaagtg	gaaacttgag	aaagaatcaa	acttagttgc	ctcatttaga	36480
agtggaaatga	tagaaactca	cagaaattaa	tgggttccca	agatcatgca	ggaagaatgg	36540
agagttaaca	tggctccatg	gattcctctt	gcgatattct	ttttaacata	cctctacctt	36600
ttgttaaatt	actaaggaat	aaccaaataca	cagacaaaaa	ctctttttatt	acctatgaat	36660
actccaaaga	aaataggaaa	agtgagggaa	ggtaattggg	ttagatttgg	aagtgactct	36720
tttgctaaat	gtatctggca	tgcattctatg	acaacatctg	tcattgaatca	ctgttggctg	36780
cgtctgagtt	ctgtggctag	cttgtctctg	tggagctttt	acgtagtaca	gcttacattt	36840
atcttggaaat	aaaattttaga	atatttcatt	gagcttgtga	gtctacacta	ttcccactct	36900
tgccatacct	ttatattatt	cttcctcagt	ttccttggtg	cccttcagtc	acagagactc	36960
tgttgtggct	cctccgtctg	gcatgcctgc	taactactac	aacttttggga	tcgctgtttt	37020

cttcataatat	tcttcacatt	cgctcatatt	gatcattgaa	atttccactt	acttattctc	37080
aagtgtaatc	tgctttttatc	tggtgagaga	gggtcaattc	ttttgatgtg	aatattctta	37140
acccattttc	ttcttcttct	ataaagctta	ctcatgtccc	taataattaa	cattttacctg	37200
tgataatgac	agactcaaaa	taactagcca	tcatatatca	gtaaagtttt	gtaaacattt	37260
atgccattct	tgactcttga	cacctatgtg	tcattatata	tgccctttaa	attaactttc	37320
accagtaatt	tatcatgact	agcaaataat	gaccacccat	attgcctata	ctcattagtt	37380
gtaaaattat	atctatgtct	ggaaaaaatg	cataaattaa	tctaagacta	ctacatatca	37440
actgtcttta	tgtaccccag	ttatgatctt	gaattgatth	tttctaattg	atttgctgcc	37500
tgacatagtg	tgatagttha	tcatcactgt	agcaagtgtg	aaaatgacaa	atctgcagag	37560
ttcctctcct	gctcacacca	tcatcacctg	ttttgctctg	tacagttttc	tctttacaat	37620
aacatggtat	atcatatctg	tttgatcat	agtatggtag	ggactgttat	gtcattagaa	37680
aggggttttt	tttcagcaaa	aatacataat	tggtatctct	tttgcccata	ggtgtgaaat	37740
tgaaacaatt	gaagacaagg	catggcatgg	cttacaccac	ctctcaaact	tgatactgac	37800
aggaaaccct	atccagagtt	tttccccagg	aagtttctct	ggactaacia	gttttagagaa	37860
tctggtggct	gtggagacaa	aattggcctc	tctagaaagc	ttccctattg	gacagcttat	37920
aaccttaaa	aaactcaatg	tggtcacaa	ttttatacat	tcctgtaagt	tacctgcata	37980
tttttccaat	ctgacgaacc	tagtacatgt	ggatctttct	tataactata	ttcaaactat	38040
tactgtcaac	gacttacagt	ttctacgtga	aaatccacaa	gtcaatctct	cttttagacat	38100
gtctttgaac	ccaattgact	tcattcaaga	ccaagccttt	caggggaatta	agctccatga	38160
actgactcta	agaggttaatt	ttaatagctc	aaatataatg	aaaacttgcc	ttcaaaacct	38220
ggctgggtta	cacgtccatc	ggttgatctt	gggagaattt	aaagatgaaa	ggaatctgga	38280
aatttttgaa	ccctctatca	tggaaggact	atgtgatgtg	accattgatg	agttcaggtt	38340
aacatataca	aatgattttt	cagatgatat	tgtaaagttc	cattgcttgg	cgaatgtttc	38400
tgcaatgtct	ctggcagggtg	tatctataaa	atatctagaa	gatgttccta	aacatttcaa	38460
atggcaatcc	ttatcaatca	ttagatgtca	acttaagcag	tttccaactc	tggatctacc	38520
ctttcttaaa	agtttgactt	taactatgaa	caaagggtct	atcagtttta	aaaaagtggc	38580
cctaccaagt	ctcagctatc	tagatcttag	tagaaatgca	ctgagcttta	gtggttgctg	38640
ttcttattct	gatttgggaa	caaacagcct	gagacactta	gacctcagct	tcaatggtgc	38700
catcattatg	agtccaattt	tcattgggtct	agaagagctg	cagcacctgg	attttcagca	38760
ctctacttta	aaaagggtca	cagaatttct	agcgttctta	tcccttgaaa	agctacttta	38820
ccttgacatc	tcttatacta	acaccaaact	tgacttcgat	ggtatatattc	ttggcttgac	38880
cagtctcaac	acattaaaaa	tggttgccaa	ttctttcaaa	gacaacaccc	tttcaaagt	38940
ctttgcaaac	acaacaaact	tgacattcct	ggatctttct	aaatgtcaat	tggaacaaat	39000
atcttggggg	gtatttgaca	ccctccatag	acttcaatta	ttaaatatga	gtcacaacaa	39060
tctattgttt	ttggattcat	cccattataa	ccagctgtat	tccctcagca	ctcttgattg	39120
cagtttcaat	cgcatagaga	catctaaagg	aatactgcaa	cattttccaa	agagtctagc	39180
cttcttcaat	cttactaaca	attctgttgc	ttgtatatgt	gaacatcaga	aattcctgca	39240
gtgggtcaag	gaacagaagc	agttcttggg	gaatgttgaa	caaatgacat	gtgcaacacc	39300
tgtagagatg	aatacctcct	tagtgttgga	ttttaataat	tctacctgtt	atatgtacaa	39360
gacaatcatc	agtgtgtcag	tggtcagttg	gattgtggta	tccactgtag	cattttctgat	39420
ataccacttc	tattttcacc	tgatacttat	tgctggctgt	aaaaagtaca	gcagaggaga	39480
aagcatctat	gatgcatttg	tgatctactc	gagtcagaat	gaggactggg	tgagaaatga	39540
gctggtaaa	aatttagaag	aaggagtgcc	ccgctttcac	ctctgccttc	actacagaga	39600
ctttattcct	ggtgtagcca	ttgctgccaa	catcatccag	gaaggcttcc	acaagagccg	39660
gaaggttatt	gtggtagtgt	ctagacactt	tattcagagc	cggtgggtga	tctttgaata	39720
tgagattgct	caaacatggc	agtttctgag	cagccgctct	ggcatcatct	tcattgtcct	39780
tgagaagggt	gagaagtccc	tgctgaggca	gcagggtggaa	ttgtatcgcc	ttcttagcag	39840
aaacacctac	ctggaatggg	aggacaatcc	tctggggagg	cacatcttct	ggagaagact	39900
taaaaatgcc	ctattggatg	gaaaagcctc	gaatcctgag	caaacagcag	aggaagaaca	39960
agaaacggca	acttggaact	gaggagaaca	aaactctggg	gcctaaaccc	agtctgtttg	40020
caattaataa	atgctacagc	tcacctgggg	ctctgctatg	gaccgagagc	ccatggaaca	40080
catggctgct	aagctatagc	atggacctta	ccgggcagaa	ggaagtagca	ctgacacctt	40140
cctttccagg	ggtatgaatt	acctaactcg	ggaaaagaaa	cataatccag	aatctttacc	40200
tttaatctga	aggagaagag	gctaaggcct	agtgagaaca	gaaaggagaa	ccagtcttca	40260
ctgggccttt	tgaatacaag	ccatgtcatg	ttctgtgttt	cagttgcttt	agaagagtat	40320

tgatagtttc	aactgaactg	aacgggtttct	tactttccct	tttttctact	gaatgcaata	40380
ttaaatagct	ctttttgaga	ggtcttcatt	ccaatttcat	cttccatttt	atgtcatttt	40440
cttttctttt	ttttttttat	ctaattctat	aagaaatatg	attgatacac	gctcacagat	40500
agcctggcca	atcctaagaa	tgctatat	attaaatata	attcctagta	tactttttact	40560
tttataaatt	cagttatcgt	ttttcatgcc	ttgactataa	actaatatca	taaataagat	40620
tgttacaggt	atgctaagaa	ggcccatatt	tgactataat	tttttaagaa	agtatgtaaa	40680
atatactttg	tcatattgtc	actgaatgtc	attcttaagt	tattacctaa	gttatggatg	40740
tcacagagtc	agtgttaaaa	ataatttggt	tgatagaaat	atttttaatc	aggagggaaa	40800
agtggagagg	ggtgcaggaa	cagaaatcat	gatttcatca	tttattcttg	atttttccgg	40860
aagttcacat	agctgaatga	caagactaca	tatgctgcaa	ctgatgttcc	ttctcatcaa	40920
ggatactctc	tgaaggactt	gagaacattt	tggggaggaa	gaaagggtcta	acatcctttt	40980
ccttcatcat	tctcattttc	ggacatgcct	tgtgagatgg	atgaatgttg	ggagtacaca	41040
tttctgcttt	caccttattt	cagtcagcat	gaacactgaa	tatataatgt	catttcacag	41100
tgtgtgtgtg	tgtgtgttgt	gtatgtacat	atatgaacct	gtacatgtgt	ttaagtttaa	41160
agagaaaata	gtgtacagag	cagctctata	tttgtgatag	ggctttaaat	agttgagcta	41220
attcagaaaa	gtatggagat	ttcttggtaa	aggaaaccaa	agtagaatca	ttacaagatc	41280
taacaataaa	aattttgaaa	caatcctaca	agtaaataata	ttggattttc	ttgtccatta	41340
agacaatatt	catactattg	aaattatgga	aacaaccctt	ggaagggttaa	tgcatagaga	41400
cagaatgcta	tctacttgca	gtggaatgtg	atttgacctt	ggagaagaag	caaaccctgc	41460
tacttgtgag	cagatgcata	aagggtggagg	ttttttattg	taagtgaat	atgccaggca	41520
cagaaggaac	tggcctttca	ggaacttttg	atgacatgag	caaagttaga	aaaaataata	41580
tgcagaacaa	tagaagagga	agacaaaaga	aagacagccc	taggatgtat	tcttcacaac	41640
gattttaaac	aatatgcttg	aaagagaatg	aagttattag	tatcaattaa	gatgtctaca	41700
atttttcataa	ttccattcaa	actggaacat	agccacctaa	ttatttgtct	cttggttagcc	41760
aagtgaata	gcagatcaag	aatctcccca	tttttctgat	ataaaaaccc	aaattcta	41820
gcagtaaatg	tcttgtcaat	cagccagata	gcacagaaga	ggcaaggcga	cagtctgtgc	41880
cccttccctc	tcacagaaac	tcctgtgcac	tctagccac	tgcttcaggc	tacaagctag	41940
aaaagcaaga	agtgaagtg	ccacagttct	ctatgtgggt	agtgccagtc	agggtcattc	42000
aacttaaac	atgagtcatt	aagaaaat	atatgcatgc	atgcattaat	gcacagagta	42060
gtttatttat	aacaactctt	tccataaagg	gctggggagt	tttcaacaaa	atataaagga	42120
acaattagtt	taatcaaaag	aaagaaatat	aggcagaaga	aagaaatgaa	agaaagaaag	42180
gaaagtttta	actgtgtatt	ccaggtttaa	ttctagagat	cttctggaat	tttagagagt	42240
gtgacttttg	gagaattcct	aaactcattt	tcagattata	ttacgtatgt	gacttggcct	42300
tcactctgtc	gagagctaag	aaagaaatga	agatcatgca	tttattatta	ggccattaca	42360
aactaataaa	tataaagata	aaaggagac	tctgtggatg	agtctccctc	ttggctttct	42420
tatgggtagt	cagagagaag	cactcagtag	ccttatecct	gacaacattt	ttgtcacatt	42480
tgttttccca	gtctgtagga	caacagcagt	ccttatgact	aaagtagatt	gtatcttttt	42540
tacctagctt	ctattcatct	gtgttgtcct	agcttccctt	ttgagtctac	agcctttgag	42600
aatcactag	aagtcactgg	aacctcatgc	tttgacttga	ggcagtcctc	atatgtgttc	42660
ctaggtactc	gaggggtcag	ttgggagact	ggggagccat	atcttaacca	tcagctttgc	42720
ttccttggtg	ttgagcatca	tgcttgacaa	agtaagcaga	caatgcctgt	atacgtgaag	42780
aagaggagaa	tcattaatgc	atgttttctt	ggtgtgctgt	tgctcttgat	acattccagt	42840
tcagaatcta	aagtcctagg	gatcttagct	gtcaacttag	ttttccctgt	ctgtcacttt	42900
gtatggatga	tttaaattgc	ttcttcactt	ggttgcttga	caccatgtat	tctaaaattt	42960
tgtggaaggt	gtgtgttggg	ggggggcgta	gttctaacaa	tagtgttctc	tagtggatac	43020
attaaaatca	tattcagcta	attaatat	gattaagttt	tgcatgctat	accgatttga	43080
taaacattca	caaaatcaca	ggcttcaaga	tttttcttaa	cacatccaaa	gtacacaggc	43140
attaaatggg	caaaactaaa	tatcaaactg	actttattta	atagtttctc	tactgttctc	43200
ttttgtttta	tgtcaagagt	tgaatgccac	tgttctgtat	ttttaattat	ttattgtttg	43260
ctattgtgag	aattcaaagc	cagaactttg	aggagctgac	agaggcactg	tggcctatga	43320
agacagtttt	tggagttaac	aatttccttg	gtaactatgg	actatgtctc	cacacttcag	43380
ctctcatatc	tgatggaata	aactcctttc	caggaggctt	ctacttatgc	taatgcaccc	43440
aagcaaacaa	ggaggcta	agaaccagct	gtttctgtct	ttatagcaat	ttcccaacat	43500
tctacacttg	aggatttctt	ctgtcacatg	atttttttca	ttgggcattc	tttcaatcct	43560
tcattaaatg	gccgagactt	ctcactagac	cccaactcaa	tgaaattctt	aagctgctag	43620

cattgaacaa	cactgacttt	ttcaaagcac	cttgataggg	aatttaagct	ggaccatctg	43680
aagcaggaaa	gtctgttggt	ttgatggaat	ttcctaattg	taccattgtg	gctttatttt	43740
gccttgttaa	tgtaagggat	tcaaagcatt	tcaacttact	actcatagtt	caagcatcta	43800
ttttgcagat	gcactgaaaa	ttaagagatt	ggagagtttg	tcatatata	ttccatcatc	43860
aactattcta	gttcttacta	aagaaggagg	gtgcaaaaat	ttgaaggata	tgttaaagtg	43920
ccttctatac	ttaatgattc	ttctagaaaa	ggcaaagtgt	tgatcttggt	ctttgttatg	43980
gtattatata	ttctcatggt	aatttgaaag	aagtttacat	accaatttca	gtttgtttac	44040
ctaggccttg	agagtcattc	tacagtacac	gattaggcta	ctatgaagac	aaaagaaatc	44100
attgtgggga	aactcagtag	agctctagat	ttacctttta	taatagatga	atcccagaat	44160
gataaagatc	aagcctggca	tgatgttaat	ttagtgggct	aggatcctgg	aaacctccta	44220
aaataggaca	tcccatgcat	ttggccttag	ccagtggagg	atctctgaga	aagtgtagaa	44280
aaacttgcaa	ggagggttcag	tgctctgaaa	gacacagagt	caaatgtaca	tgtaattcca	44340
gttcttcttt	tatatatgtg	tactttacat	agtccttgaa	gtatcgagag	gctcaggtat	44400
agggtgctacc	accttgatag	agttcactta	gccaaaatgc	agaaatggat	gccagagag	44460
aatagattac	ttgtcctgca	tcctgtaact	taaaatgtgt	taataatcat	cataataaat	44520
tctatctgcc	aaatattttca	tatgtgcatg	agactgtttt	agtttaatta	ttaaaattgc	44580
tttctgatgc	agctcttagc	cacattgtca	tttcccatac	aatgaaactg	agacccaaaa	44640
gcaaattctc	caattccaag	ggtagaattc	aagtaatcct	gatataccaga	gctgctaatt	44700
ttttgccaca	cagtagactg	ctgcagtgct	tgggcttttt	tgctggggct	cattcactca	44760
ctaacgggag	aatcctgtgg	acaagggtcag	caactccctt	accatctaga	aattgaaggt	44820
ttcaaaggca	ctgcatgtga	ctttccttga	tttctatgga	aatgaagatg	gtccctcctg	44880
tgacagtgtc	aagtgccgag	tctgagtgtg	aatgtgcttt	ttggcacaaa	ttgttctggt	44940
ctaatagtgt	tgattataat	tataaaataa	tgtgtttctg	aaaggctgca	agcaattctg	45000
ggaatgacaa	taagggtttc	gaaacaacat	ggtatttatg	tgagaagtgt	tttgttgaaa	45060
attaaacctg	tgtttaggag	aaaggatcct	gttgtttgct	cctaagaaac	tatcacacca	45120
tgtaattaaa	tcagagccag	ttggttgcca	attggagttc	ttgtctcaca	tgaacaatat	45180
tgtatcacct	acaacaaaca	agatatgact	gaccagaggt	agccaagact	ctttacccaa	45240
atcctgtttc	tctatcttct	cagggcccag	aaaaagatg	gaaatgcatg	gtcagttttt	45300
ttccaaggct	gggaattaac	cttgtagggt	gaagccttcc	tcaagttcat	ctcagattgt	45360
ccgtaaggaa	taggtttttc	attcaagggc	cttttatagg	aggctgtatc	tgtaaaataag	45420
tgaggaattc	aatgtttgag	aggctgtcct	gacttccttt	cttgggagga	aaaacaaaat	45480
ccttctatga	agattaggaa	tgtcttcgat	gttctcagac	ctcaaaggca	gaaaaaagta	45540
tgcagtgtaa	tttgtttgta	tgtatctctc	ttaaaataat	atctaccata	acattgtctc	45600
ccaaccggga	tttgtgtttt	attttcacca	aggacatcat	aaggtttaaa	gcagatcttg	45660
caagggacgt	cataaaaaata	gatataatgac	aggatggtaa	agtttaccag	gctgaagaac	45720
caottgatga	ttttggctat	atttaattat	ataaatttct	gcttttatta	tctctcttgc	45780
tagaaatttt	atttgataac	tagagtttaa	taatctgtat	ttttaaaaat	attctatgtg	45840
caatttttaag	tataaacaga	tctggaaatt	actatttaag	aggcaacagc	ctataatgta	45900
ccatgtttta	tatggccatg	tgctctgtcc	ttgagattta	ctgctgagag	ccaaagaaag	45960
atcaacaaaa	tggaacggga	aacttattta	tttatttatt	tattttattta	tttatttatt	46020
tattttattta	tttatttatt	ttaaagaaaa	aggtgcttca	tttatctgat	gattttattc	46080
ttttacactg	tgtaattgat	tcttctcaat	tctatctgat	cagactcatg	tggaagaatc	46140
tgtccagttt	gatgtaatct	tcaaacatcc	acatagaagt	tataatctga	cagtcatgtg	46200
tttctcctgg	tttctacatt	atatgttgcc	ttcttcatcc	ccttttgga	tttgagatac	46260
ataagcttaa	atcagaataa	tatcatggtc	tgtcatgaac	tctctgaggc	atctgttgac	46320
agctttaatt	tattggttta	tcaaccccaa	acataccaag	tctaacttac	ctcccatttg	46380
taaactgaat	attcacttgt	cactgacata	cacagctgca	acaaatggcc	ttctctgtaa	46440
agcaccaggc	tctcctgcac	agacttacca	cataattgtc	agtcttccca	ggaaaccctt	46500
ttcatctctg	ttgaggggag	gtaaggcagt	gagcactaat	agcttaaatt	cagtcatttt	46560
gacctttaaa	ctaccaaccc	tgaatcttct	ggaggagtct	atggctcccc	agtgggaaac	46620
gcatgctgga	gaaacttact	acttgcaaaa	agcacttttg	aaataagctg	tggggatgaa	46680
tctctgetta	atgctgtgct	cagctcactg	cagggctcctg	cggagtcttt	actcttcatc	46740
ttctgcagca	tgggctgtgg	cctgagagct	gcactgctaa	gtgtagggag	cctcctttct	46800
gccactcaat	gaattagggg	ctgaccaatt	gtgtcattca	gggtgcagac	tagccactag	46860
aaaacttcct	ctgagctcaa	gtatcatacc	ccgagaacgg	cacagagagg	taggaccatt	46920

atTTTTgcag	ggcatgagtt	gcctgcaa	tagatgggtg	tattttttta	tggttaatgt	46980
gctggttatt	tttacttatc	atgattgatg	agtggtaa	aatgacctct	ataaaaaatac	47040
atgtgtgttt	agaatatgag	tttattagag	ggaaaaaaca	aaatttagca	gagagatgca	47100
gatgtggaga	gagacaggag	aaagggctag	agatggatat	cagcagttgg	gggcagaggt	47160
gtgcatctct	ataatgtgcc	agagacctgg	tgtggagatg	cttccaggag	tctatggggg	47220
tgtctttaac	ttcagctaag	agatcctagc	actggcagat	acagagcttg	aagtggcaac	47280
ctcctttata	gccaaactaag	atccctcagt	ggagggataa	ggacaacaac	ccactcacia	47340
aacttttgac	ccaaaatctg	tcctgtctgc	aagaagggac	agaaatggaa	ccgagattga	47400
gggcatggcc	aatcaatgac	tatcccaact	tgagactcat	ccctctagac	tgaaacacia	47460
agaaaagggc	aaacatgggc	agaaatttgg	accctgaact	tatgtagcat	atgtacagct	47520
tggtattcat	gtgtggattc	ctcaacaact	gcagcagggg	ctgtccctga	atctgttgcc	47580
tgcttgagg	tcctgttccc	ctaactaagt	tgccttgtct	ggtctcagtg	agagagggat	47640
gaaactcttc	ctgcagtgc	ttgatatgtc	aagggtcaagt	gatacccagg	ggctgggagt	47700
cttcccattc	tcagagggaa	aggggaagag	gcgtggggaa	gggactgtgt	gagggggcac	47760
tgggaagagg	gatgctgaga	ttgggggtga	aggtgaacaa	gtaagtaa	taatggaaaa	47820
aaggaagtta	tcaccagtgc	aattcccaaa	gggaaagaag	caaaccctg	tcagatgatg	47880
ggctgaagtt	ccggttatcc	ttcttgcagt	cttacctctg	caaaacagtc	tccacatctg	47940
taaaactcca	aagatgaagt	aatgtccat	ctccacaatt	ctattctgta	attagaacag	48000
taaccctacc	atgcaactct	tttgctctcc	tggactgtgg	ttctaacatt	tgtgacctca	48060
ttatagcata	caaagactag	aagcatcttt	catcaattaa	taagcactca	agcattagta	48120
atTTTTcact	ttttcctcag	ttccagaaaa	ggattgagct	aagatcagtt	gagtgggtta	48180
acaaagtact	attgaaggca	ggaaggatgg	ctgggttaact	gctgcaacca	gtgatatcat	48240
aatataaagg	ccagttcctg	gatgtttgga	ttcactgttt	acaatgtaaa	agtatatgta	48300
cagctatagg	tatgatagct	ttgagagtca	agtaagactg	gggattcaag	aaaattcaac	48360
agagtgaat	tgaaatacca	taaatgatat	gtatctcttt	tgccaaatca	tataaccccc	48420
aaaacacctt	ccatcatgca	tatgcattaa	gaagcttgta	aattaatcat	ctgcaccatt	48480
ttcacaagat	tatcttgag	tttagcagtg	tttttttttt	atacttggcc	actttgaata	48540
atcttaagga	gagaaataga	gtttgtctaa	atccaagcac	gtcttgaaact	aatgcttaca	48600
attatccttg	tttcccacat	ttgacattta	aagtgatata	tcatagggtc	ctacattgct	48660
agctgtggaa	gcgccatctg	acccttctgt	cctctcacca	tctgtgaatt	cttgtcagct	48720
cagagtaaac	tctgcataaa	tttcaccatt	gaagattagt	gatagaagag	aactctattc	48780
gctctttctt	ctggctttat	tttttatatt	taatgctgtc	tgattgccc	aggtatgtat	48840
ggaggggtga	cacagacggt	acacagacct	aagtcagggt	tctaagcatc	ccaggaactt	48900
ccctccaat	attcttttct	gagcatatgc	cctcagttag	ttttcctctt	catatgatct	48960
gtgctcctgt	ttataccaaa	ctctcggctc	tggcagcatc	ctcgtccaaa	aagcacaagt	49020
tcagttaagt	tactgggtca	cataccacca	ccatttttcta	ctctttatac	tttctttccc	49080
tgattacatt	ccaatagtgt	gtaggcatga	acacatgtgc	acacatacac	acatgtgcag	49140
attatagtcc	acttgtagca	ataagaggat	tctcagtaca	attcgtggga	gttggatttc	49200
tcttgcccc	acataggtac	aattaatccc	agtactcggg	aggcaaaggc	aggcagattc	49260
ctgagttcaa	ggccagcctg	gtttaaaaag	tgagttccag	gacagccaaa	gctaccacaga	49320
aaaaccccg	ttcaaaaaac	caaataaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa	49380
aaaaaaaaaa	ggatcgaatt	ctaattatca	gccaaaggtg	ggaatacctt	tatcttttgt	49440
gacatatgtg	gaccatactt	taagtttttg	tgggtactaa	cttcattctt	gttttatatt	49500
tctctgtctc	tctgaattct	ctttctcttt	cctattaccc	ttatgccc	agcatgagaa	49560
ttccaacttc	catatttggt	tttattcttt	ctttgcactt	ttcctctctt	tctgttttgt	49620
aactctataa	ccctttttgt	ttgcttggtt	ttgcatggga	tagttattat	gcattctatc	49680
tcactatggt	agaaaaaata	gtttcagctc	tgggaattga	gcagttctgt	gctgatttca	49740
tgtctaacac	tatatgcttt	tttttctctt	ccttcaaata	gaggtaatag	atacctttca	49800
gtatctatta	gcagaggagt	ttgcagacat	atacaaagtt	catttttctc	ctaggaagtt	49860
ttcttttctt	tgcttttcat	gccatctaac	atgtgtagga	aagctgcttt	ctgctaccac	49920
aatacaagat	gcataagg	gcggagctaa	gtgtcaaaat	catgctccca	aagttttata	49980
catttttaggt	tatttttcaga					50000

<211> 25
 <212> DNA
 <213> Mus musculus

 <400> 49
 cagtcggtca gcaaacgcct tcttc 25

 <210> 50
 <211> 25
 <212> DNA
 <213> Mus musculus

 <400> 50
 caaggcaggc tagcaggaaa gggcg 25

 <210> 51
 <211> 24
 <212> DNA
 <213> Mus musculus

 <400> 51
 ttattcatct ttggagagga gtgg 24

 <210> 52
 <211> 26
 <212> DNA
 <213> Mus musculus

 <400> 52
 aaggaagttt agttagaacc accttg 26

 <210> 53
 <211> 26
 <212> DNA
 <213> Mus musculus

 <400> 53
 tctctgctc acaccatcat cacctg 26

 <210> 54
 <211> 24
 <212> DNA
 <213> Mus musculus

 <400> 54
 catctgttcc atgggctctc ggctc 24

 <210> 55
 <211> 19

<212> DNA
 <213> Homo sapiens

 <400> 55
 gctcggtaaa cggatgatag 19

 <210> 56
 <211> 20
 <212> DNA
 <213> Homo sapiens

 <400> 56
 tgagaagttc tgggcagaag 20

 <210> 57
 <211> 18
 <212> DNA
 <213> Homo sapiens

 <400> 57
 tctctggtct aggagagg 18

 <210> 58
 <211> 19
 <212> DNA
 <213> Homo sapiens

 <400> 58
 ccagtc caat aatgaaatg 19

 <210> 59
 <211> 30
 <212> DNA
 <213> Homo sapiens

 <400> 59
 ccatcacatc tgtatgaaga gctggatgac 30

 <210> 60
 <211> 30
 <212> DNA
 <213> Homo sapiens

 <400> 60
 tgactttctt tgatcatgggt tccttgactg 30

 <210> 61
 <211> 18
 <212> DNA

<213> Mus musculus

<400> 61

atgccatgcc ttgtcttc

18

<210> 62

<211> 16

<212> DNA

<213> Mus musculus

<400> 62

tttaaattct cccaag

16

<210> 63

<211> 15

<212> DNA

<213> Mus musculus

<400> 63

cagctcttct agacc

15

<210> 64

<211> 20

<212> DNA

<213> Mus musculus

<400> 64

tgtgaacatc agaaattcct

20

<210> 65

<211> 19

<212> DNA

<213> Mus musculus

<400> 65

tgagattgct caaacatgg

19

<210> 66

<211> 22

<212> DNA

<213> Mus musculus

<400> 66

ttgaaacaat tgaagacaag gc

22

<210> 67

<211> 19

<212> DNA

<213> Mus musculus

<400> 67 cctggctggt ttacacgtc	19
<210> 68 <211> 22 <212> DNA <213> Mus musculus	
<400> 68 tttcatgggt ctagaagagc tg	22
<210> 69 <211> 18 <212> DNA <213> Mus musculus	
<400> 69 aagaactgct tctgttcc	18
<210> 70 <211> 19 <212> DNA <213> Mus musculus	
<400> 70 tcagaaactg ccatgtttg	19
<210> 71 <211> 20 <212> DNA <213> Mus musculus	
<400> 71 tgagctggta aagaatttag	20
<210> 72 <211> 21 <212> DNA <213> Mus musculus	
<400> 72 ctgacgaacc tagtacatgt g	21
<210> 73 <211> 19 <212> DNA <213> Mus musculus	

<400> 73 atgtcaagtt tgttgtgtt	19
<210> 74 <211> 26 <212> DNA <213> Homo sapiens	
<400> 74 gagctggatg actaggatta atattc	26
<210> 75 <211> 22 <212> DNA <213> Homo sapiens	
<400> 75 tcaaattgca caggccctct ag	22
<210> 76 <211> 22 <212> DNA <213> Homo sapiens	
<400> 76 caatctctct ttagacctgt cc	22
<210> 77 <211> 22 <212> DNA <213> Homo sapiens	
<400> 77 aatacttttag gctggttgtc cc	22
<210> 78 <211> 22 <212> DNA <213> Homo sapiens	
<400> 78 gaagttgatc taccaagcct tg	22
<210> 79 <211> 23 <212> DNA <213> Homo sapiens	
<400> 79	

ggaagtcatt atgtgattga gac 23

<210> 80
<211> 26
<212> DNA
<213> Homo sapiens

<400> 80
cttctctggac ctctctcagt gtcaac 26

<210> 81
<211> 22
<212> DNA
<213> Homo sapiens

<400> 81
gaaggcagag ctgaaatgga gg 22

<210> 82
<211> 26
<212> DNA
<213> Homo sapiens

<400> 82
tcagatgaat aagaccatca ttggtg 26

<210> 83
<211> 18
<212> DNA
<213> Homo sapiens

<400> 83
aacaagtgtt ggacccag 18

<210> 84
<211> 19
<212> DNA
<213> Homo sapiens

<400> 84
gtaaatttgg acagtttcc 19

<210> 85
<211> 21
<212> DNA
<213> Homo sapiens

<400> 85
ttcagtattc ctatcactca g 21

<210> 86	
<211> 20	
<212> DNA	
<213> Homo sapiens	
<400> 86	
ttataagtgt ctgaactccc	20
<210> 87	
<211> 19	
<212> DNA	
<213> Homo sapiens	
<400> 87	
tcggtcctca gtgtgcttg	19
<210> 88	
<211> 18	
<212> DNA	
<213> Homo sapiens	
<400> 88	
gtgtcccagc acttcac	18
<210> 89	
<211> 18	
<212> DNA	
<213> Homo sapiens	
<400> 89	
aacctcctga ggcatttc	18
<210> 90	
<211> 19	
<212> DNA	
<213> Homo sapiens	
<400> 90	
gtttcaaatt ggaatgctg	19
<210> 91	
<211> 18	
<212> DNA	
<213> Homo sapiens	
<400> 91	
aaggaaacgt atccaatg	18

<210> 92	
<211> 19	
<212> DNA	
<213> Homo sapiens	
<400> 92	
aagcacactg aggaccgac	19
<210> 93	
<211> 18	
<212> DNA	
<213> Homo sapiens	
<400> 93	
gatgaagtgc tgggacac	18
<210> 94	
<211> 20	
<212> DNA	
<213> Homo sapiens	
<400> 94	
tcctcttcag atagatgttg	20
<210> 95	
<211> 18	
<212> DNA	
<213> Homo sapiens	
<400> 95	
tttctttgtc atgggttc	18
<210> 96	
<211> 20	
<212> DNA	
<213> Homo sapiens	
<400> 96	
tttaggttct tattcagcag	20
<210> 97	
<211> 21	
<212> DNA	
<213> Homo sapiens	
<400> 97	
gctctagatt ggtcagatta g	21

<210> 98
 <211> 839
 <212> PRT
 <213> Homo sapiens

<400> 98

Met	Met	Ser	Ala	Ser	Arg	Leu	Ala	Gly	Thr	Leu	Ile	Pro	Ala	Met	Ala
1				5					10					15	
Phe	Leu	Ser	Cys	Val	Arg	Pro	Glu	Ser	Trp	Glu	Pro	Cys	Val	Glu	Val
			20					25					30		
Val	Pro	Asn	Ile	Thr	Tyr	Gln	Cys	Met	Glu	Leu	Asn	Phe	Tyr	Lys	Ile
		35					40					45			
Pro	Asp	Asn	Leu	Pro	Phe	Ser	Thr	Lys	Asn	Leu	Asp	Leu	Ser	Phe	Asn
	50					55					60				
Pro	Leu	Arg	His	Leu	Gly	Ser	Tyr	Ser	Phe	Phe	Ser	Phe	Pro	Glu	Leu
65					70					75					80
Gln	Val	Leu	Asp	Leu	Ser	Arg	Cys	Glu	Ile	Gln	Thr	Ile	Glu	Asp	Gly
				85					90					95	
Ala	Tyr	Gln	Ser	Leu	Ser	His	Leu	Ser	Thr	Leu	Ile	Leu	Thr	Gly	Asn
			100					105					110		
Pro	Ile	Gln	Ser	Leu	Ala	Leu	Gly	Ala	Phe	Ser	Gly	Leu	Ser	Ser	Leu
	115						120					125			
Gln	Lys	Leu	Val	Ala	Val	Glu	Thr	Asn	Leu	Ala	Ser	Leu	Glu	Asn	Phe
	130						135				140				
Pro	Ile	Gly	His	Leu	Lys	Thr	Leu	Lys	Glu	Leu	Asn	Val	Ala	His	Asn
145					150					155					160
Leu	Ile	Gln	Ser	Phe	Lys	Leu	Pro	Glu	Tyr	Phe	Ser	Asn	Leu	Thr	Asn
				165					170					175	
Leu	Glu	His	Leu	Asp	Leu	Ser	Ser	Asn	Lys	Ile	Gln	Ser	Ile	Tyr	Cys
			180					185					190		
Thr	Asp	Leu	Arg	Val	Leu	His	Gln	Met	Pro	Leu	Leu	Asn	Leu	Ser	Leu
		195					200					205			
Asp	Leu	Ser	Leu	Asn	Pro	Met	Asn	Phe	Ile	Gln	Pro	Gly	Ala	Phe	Lys
	210					215					220				
Glu	Ile	Arg	Leu	His	Lys	Leu	Thr	Leu	Arg	Asn	Asn	Phe	Asp	Ser	Leu
225					230					235					240
Asn	Val	Met	Lys	Thr	Cys	Ile	Gln	Gly	Leu	Ala	Gly	Leu	Glu	Val	His
				245					250					255	
Arg	Leu	Val	Leu	Gly	Glu	Phe	Arg	Asn	Glu	Gly	Asn	Leu	Glu	Lys	Phe

260					265					270						
Asp	Lys	Ser	Ala	Leu	Glu	Gly	Leu	Cys	Asn	Leu	Thr	Ile	Glu	Glu	Phe	
275					280					285						
Arg	Leu	Ala	Tyr	Leu	Asp	Tyr	Tyr	Leu	Asp	Asp	Ile	Ile	Asp	Leu	Phe	
290					295					300						
Asn	Cys	Leu	Thr	Asn	Val	Ser	Ser	Phe	Ser	Leu	Val	Ser	Val	Thr	Ile	
305					310					315					320	
Glu	Arg	Val	Lys	Asp	Phe	Ser	Tyr	Asn	Phe	Gly	Trp	Gln	His	Leu	Glu	
325					330					335						
Leu	Val	Asn	Cys	Lys	Phe	Gly	Gln	Phe	Pro	Thr	Leu	Lys	Leu	Lys	Ser	
340					345					350						
Leu	Lys	Arg	Leu	Thr	Phe	Thr	Ser	Asn	Lys	Gly	Gly	Asn	Ala	Phe	Ser	
355					360					365						
Glu	Val	Asp	Leu	Pro	Ser	Leu	Glu	Phe	Leu	Asp	Leu	Ser	Arg	Asn	Gly	
370					375					380						
Leu	Ser	Phe	Lys	Gly	Cys	Cys	Ser	Gln	Ser	Asp	Phe	Gly	Thr	Thr	Ser	
385					390					395					400	
Leu	Lys	Tyr	Leu	Asp	Leu	Ser	Phe	Asn	Gly	Val	Ile	Thr	Met	Ser	Ser	
405					410					415						
Asn	Phe	Leu	Gly	Leu	Glu	Gln	Leu	Glu	His	Leu	Asp	Phe	Gln	His	Ser	
420					425					430						
Asn	Leu	Lys	Gln	Met	Ser	Glu	Phe	Ser	Val	Phe	Leu	Ser	Leu	Arg	Asn	
435					440					445						
Leu	Ile	Tyr	Leu	Asp	Ile	Ser	His	Thr	His	Thr	Arg	Val	Ala	Phe	Asn	
450					455					460						
Gly	Ile	Phe	Asn	Gly	Leu	Ser	Ser	Leu	Glu	Val	Leu	Lys	Met	Ala	Gly	
465					470					475					480	
Asn	Ser	Phe	Gln	Glu	Asn	Phe	Leu	Pro	Asp	Ile	Phe	Thr	Glu	Leu	Arg	
485					490					495						
Asn	Leu	Thr	Phe	Leu	Asp	Leu	Ser	Gln	Cys	Gln	Leu	Glu	Gln	Leu	Ser	
500					505					510						
Pro	Thr	Ala	Phe	Asn	Ser	Leu	Ser	Ser	Leu	Gln	Val	Leu	Asn	Met	Ser	
515					520					525						
His	Asn	Asn	Phe	Phe	Ser	Leu	Asp	Thr	Phe	Pro	Tyr	Lys	Cys	Leu	Asn	
530					535					540						
Ser	Leu	Gln	Val	Leu	Asp	Tyr	Ser	Leu	Asn	His	Ile	Met	Thr	Ser	Lys	
545					550					555					560	

Lys Gln Glu Leu Gln His Phe Pro Ser Ser Leu Ala Phe Leu Asn Leu
 565 570 575
 Thr Gln Asn Asp Phe Ala Cys Thr Cys Glu His Gln Ser Phe Leu Gln
 580 585 590
 Trp Ile Lys Asp Gln Arg Gln Leu Leu Val Glu Val Glu Arg Met Glu
 595 600 605
 Cys Ala Thr Pro Ser Asp Lys Gln Gly Met Pro Val Leu Ser Leu Asn
 610 615 620
 Ile Thr Cys Gln Met Asn Lys Thr Ile Ile Gly Val Ser Val Leu Ser
 625 630 635 640
 Val Leu Val Val Ser Val Val Ala Val Leu Val Tyr Lys Phe Tyr Phe
 645 650 655
 His Leu Met Leu Leu Ala Gly Cys Ile Lys Tyr Gly Arg Gly Glu Asn
 660 665 670
 Ile Tyr Asp Ala Phe Val Ile Tyr Ser Ser Gln Asp Glu Asp Trp Val
 675 680 685
 Arg Asn Glu Leu Val Lys Asn Leu Glu Glu Gly Val Pro Pro Phe Gln
 690 695 700
 Leu Cys Leu His Tyr Arg Asp Phe Ile Pro Gly Val Ala Ile Ala Ala
 705 710 715 720
 Asn Ile Ile His Glu Gly Phe His Lys Ser Arg Lys Val Ile Val Val
 725 730 735
 Val Ser Gln His Phe Ile Gln Ser Arg Trp Cys Ile Phe Glu Tyr Glu
 740 745 750
 Ile Ala Gln Thr Trp Gln Phe Leu Ser Ser Arg Ala Gly Ile Ile Phe
 755 760 765
 Ile Val Leu Gln Lys Val Glu Lys Thr Leu Leu Arg Gln Gln Val Glu
 770 775 780
 Leu Tyr Arg Leu Leu Ser Arg Asn Thr Tyr Leu Glu Trp Glu Asp Ser
 785 790 795 800
 Val Leu Gly Arg His Ile Phe Trp Arg Arg Leu Arg Lys Ala Leu Leu
 805 810 815
 Asp Gly Lys Ser Trp Asn Pro Glu Gly Thr Val Gly Thr Gly Cys Asn
 820 825 830
 Trp Gln Glu Ala Thr Ser Ile
 835

<210> 99
 <211> 835
 <212> PRT
 <213> Mus musculus

<400> 99

Met	Met	Pro	Pro	Trp	Leu	Leu	Ala	Arg	Thr	Leu	Ile	Met	Ala	Leu	Phe
1				5					10					15	
Phe	Ser	Cys	Leu	Thr	Pro	Gly	Ser	Leu	Asn	Pro	Cys	Ile	Glu	Val	Val
			20					25					30		
Pro	Asn	Ile	Thr	Tyr	Gln	Cys	Met	Asp	Gln	Lys	Leu	Ser	Lys	Val	Pro
		35					40					45			
Asp	Asp	Ile	Pro	Ser	Ser	Thr	Lys	Asn	Ile	Asp	Leu	Ser	Phe	Asn	Pro
	50					55					60				
Leu	Lys	Ile	Leu	Lys	Ser	Tyr	Ser	Phe	Ser	Asn	Phe	Ser	Glu	Leu	Gln
65					70					75					80
Trp	Leu	Asp	Leu	Ser	Arg	Cys	Glu	Ile	Glu	Thr	Ile	Glu	Asp	Lys	Ala
				85					90					95	
Trp	His	Gly	Leu	His	His	Leu	Ser	Asn	Leu	Ile	Leu	Thr	Gly	Asn	Pro
		100						105					110		
Ile	Gln	Ser	Phe	Ser	Pro	Gly	Ser	Phe	Ser	Gly	Leu	Thr	Ser	Leu	Glu
		115					120					125			
Asn	Leu	Val	Ala	Val	Glu	Thr	Lys	Leu	Ala	Ser	Leu	Glu	Ser	Phe	Pro
	130					135					140				
Ile	Gly	Gln	Leu	Ile	Thr	Leu	Lys	Lys	Leu	Asn	Val	Ala	His	Asn	Phe
145					150					155					160
Ile	His	Ser	Cys	Lys	Leu	Pro	Ala	Tyr	Phe	Ser	Asn	Leu	Thr	Asn	Leu
			165						170					175	
Val	His	Val	Asp	Leu	Ser	Tyr	Asn	Tyr	Ile	Gln	Thr	Ile	Thr	Val	Asn
		180						185					190		
Asp	Leu	Gln	Phe	Leu	Arg	Glu	Asn	Pro	Gln	Val	Asn	Leu	Ser	Leu	Asp
	195						200					205			
Met	Ser	Leu	Asn	Pro	Ile	Asp	Phe	Ile	Gln	Asp	Gln	Ala	Phe	Gln	Gly
	210					215					220				
Ile	Lys	Leu	His	Glu	Leu	Thr	Leu	Arg	Gly	Asn	Phe	Asn	Ser	Ser	Asn
225					230					235					240
Ile	Met	Lys	Thr	Cys	Leu	Gln	Asn	Leu	Ala	Gly	Leu	His	Val	His	Arg
				245					250					255	

Leu Ile Leu Gly Glu Phe Lys Asp Glu Arg Asn Leu Glu Ile Phe Glu
 260 265 270
 Pro Ser Ile Met Glu Gly Leu Cys Asp Val Thr Ile Asp Glu Phe Arg
 275 280 285
 Leu Thr Tyr Thr Asn Asp Phe Ser Asp Asp Ile Val Lys Phe His Cys
 290 295 300
 Leu Ala Asn Val Ser Ala Met Ser Leu Ala Gly Val Ser Ile Lys Tyr
 305 310 315 320
 Leu Glu Asp Val Pro Lys His Phe Lys Trp Gln Ser Leu Ser Ile Ile
 325 330 335
 Arg Cys Gln Leu Lys Gln Phe Pro Thr Leu Asp Leu Pro Phe Leu Lys
 340 345 350
 Ser Leu Thr Leu Thr Met Asn Lys Gly Ser Ile Ser Phe Lys Lys Val
 355 360 365
 Ala Leu Pro Ser Leu Ser Tyr Leu Asp Leu Ser Arg Asn Ala Leu Ser
 370 375 380
 Phe Ser Gly Cys Cys Ser Tyr Ser Asp Leu Gly Thr Asn Ser Leu Arg
 385 390 395 400
 His Leu Asp Leu Ser Phe Asn Gly Ala Ile Ile Met Ser Ala Asn Phe
 405 410 415
 Met Gly Leu Glu Glu Leu Gln His Leu Asp Phe Gln His Ser Thr Leu
 420 425 430
 Lys Arg Val Thr Glu Phe Ser Ala Phe Leu Ser Leu Glu Lys Leu Leu
 435 440 445
 Tyr Leu Asp Ile Ser Tyr Thr Asn Thr Lys Ile Asp Phe Asp Gly Ile
 450 455 460
 Phe Leu Gly Leu Thr Ser Leu Asn Thr Leu Lys Met Ala Gly Asn Ser
 465 470 475 480
 Phe Lys Asp Asn Thr Leu Ser Asn Val Phe Ala Asn Thr Thr Asn Leu
 485 490 495
 Thr Phe Leu Asp Leu Ser Lys Cys Gln Leu Glu Gln Ile Ser Trp Gly
 500 505 510
 Val Phe Asp Thr Leu His Arg Leu Gln Leu Leu Asn Met Ser His Asn
 515 520 525
 Asn Leu Leu Phe Leu Asp Ser Ser His Tyr Asn Gln Leu Tyr Ser Leu
 530 535 540
 Ser Thr Leu Asp Cys Ser Phe Asn Arg Ile Glu Thr Ser Lys Gly Ile

545		550		555		560
Leu Gln His Phe Pro Lys Ser Leu Ala Phe Phe Asn Leu Thr Asn Asn						
		565		570		575
Ser Val Ala Cys Ile Cys Glu His Gln Lys Phe Leu Gln Trp Val Lys						
		580		585		590
Glu Gln Lys Gln Phe Leu Val Asn Val Glu Gln Met Thr Cys Ala Thr						
		595		600		605
Pro Val Glu Met Asn Thr Ser Leu Val Leu Asp Phe Asn Asn Ser Thr						
		610		615		620
Cys Tyr Met Tyr Lys Thr Ile Ile Ser Val Ser Val Val Ser Val Ile						
		625		630		635
Val Val Ser Thr Val Ala Phe Leu Ile Tyr His Phe Tyr Phe His Leu						
		645		650		655
Ile Leu Ile Ala Gly Cys Lys Lys Tyr Ser Arg Gly Glu Ser Ile Tyr						
		660		665		670
Asp Ala Phe Val Ile Tyr Ser Ser Gln Asn Glu Asp Trp Val Arg Asn						
		675		680		685
Glu Leu Val Lys Asn Leu Glu Glu Gly Val Pro Arg Phe His Leu Cys						
		690		695		700
Leu His Tyr Arg Asp Phe Ile Pro Gly Val Ala Ile Ala Ala Asn Ile						
		705		710		715
Ile Gln Glu Gly Phe His Lys Ser Arg Lys Val Ile Val Val Val Ser						
		725		730		735
Arg His Phe Ile Gln Ser Arg Trp Cys Ile Phe Glu Tyr Glu Ile Ala						
		740		745		750
Gln Thr Trp Gln Phe Leu Ser Ser Arg Ser Gly Ile Ile Phe Ile Val						
		755		760		765
Leu Glu Lys Val Glu Lys Ser Leu Leu Arg Gln Gln Val Glu Leu Tyr						
		770		775		780
Arg Leu Leu Ser Arg Asn Thr Tyr Leu Glu Trp Glu Asp Asn Pro Leu						
		785		790		795
Gly Arg His Ile Phe Trp Arg Arg Leu Lys Asn Ala Leu Leu Asp Gly						
		805		810		815
Lys Ala Ser Asn Pro Glu Gln Thr Ala Glu Glu Glu Gln Glu Thr Ala						
		820		825		830
Thr Trp Thr						
		835				

<210> 100
 <211> 25
 <212> DNA
 <213> Mus musculus

 <400> 100
 atcgatacca ggaggcttga atccc 25

<210> 101
 <211> 26
 <212> DNA
 <213> Mus musculus

 <400> 101
 tatcgatacc aggaagcttg aatccc 26

<210> 102
 <211> 34
 <212> DNA
 <213> Mus musculus

 <400> 102
 cagggtacct cacaggtgaa aatagaagtg gtat 34

<210> 103
 <211> 31
 <212> DNA
 <213> Mus musculus

 <400> 103
 gccgaattca atgtacaaga caatcatcag t 31

<210> 104
 <211> 835
 <212> PRT
 <213> Mus musculus

<400> 104
 Met Met Pro Pro Trp Leu Leu Ala Arg Thr Leu Ile Met Ala Leu Phe
 1 5 10 15

 Phe Ser Cys Leu Thr Pro Gly Ser Leu Asn Pro Cys Ile Glu Val Val
 20 25 30

 Pro Asn Ile Thr Tyr Gln Cys Met Asp Gln Lys Leu Ser Lys Val Pro
 35 40 45

 Asp Asp Ile Pro Ser Ser Thr Lys Asn Ile Asp Leu Ser Phe Asn Pro
 50 55 60

Leu	Lys	Ile	Leu	Lys	Ser	Tyr	Ser	Phe	Ser	Asn	Phe	Ser	Glu	Leu	Gln	65	70	75	80
Trp	Leu	Asp	Leu	Ser	Arg	Cys	Glu	Ile	Glu	Thr	Ile	Glu	Asp	Lys	Ala	85	90	95	
Trp	His	Gly	Leu	His	His	Leu	Ser	Asn	Leu	Ile	Leu	Thr	Gly	Asn	Pro	100	105	110	
Ile	Gln	Ser	Phe	Ser	Pro	Gly	Ser	Phe	Ser	Gly	Leu	Thr	Ser	Leu	Glu	115	120	125	
Asn	Leu	Val	Ala	Val	Glu	Thr	Lys	Leu	Ala	Ser	Leu	Glu	Ser	Phe	Pro	130	135	140	
Ile	Gly	Gln	Leu	Ile	Thr	Leu	Lys	Lys	Leu	Asn	Val	Ala	His	Asn	Phe	145	150	155	160
Ile	His	Ser	Cys	Lys	Leu	Pro	Ala	Tyr	Phe	Ser	Asn	Leu	Thr	Asn	Leu	165	170	175	
Val	His	Val	Asp	Leu	Ser	Tyr	Asn	Tyr	Ile	Gln	Thr	Ile	Thr	Val	Asn	180	185	190	
Asp	Leu	Gln	Phe	Leu	Arg	Glu	Asn	Pro	Gln	Val	Asn	Leu	Ser	Leu	Asp	195	200	205	
Met	Ser	Leu	Asn	Pro	Ile	Asp	Phe	Ile	Gln	Asp	Gln	Ala	Phe	Gln	Gly	210	215	220	
Ile	Lys	Leu	His	Glu	Leu	Thr	Leu	Arg	Gly	Asn	Phe	Asn	Ser	Ser	Asn	225	230	235	240
Ile	Met	Lys	Thr	Cys	Leu	Gln	Asn	Leu	Ala	Gly	Leu	His	Val	His	Arg	245	250	255	
Leu	Ile	Leu	Gly	Glu	Phe	Lys	Asp	Glu	Arg	Asn	Leu	Glu	Ile	Phe	Glu	260	265	270	
Pro	Ser	Ile	Met	Glu	Gly	Leu	Cys	Asp	Val	Thr	Ile	Asp	Glu	Phe	Arg	275	280	285	
Leu	Thr	Tyr	Thr	Asn	Asp	Phe	Ser	Asp	Asp	Ile	Val	Lys	Phe	His	Cys	290	295	300	
Leu	Ala	Asn	Val	Ser	Ala	Met	Ser	Leu	Ala	Gly	Val	Ser	Ile	Lys	Tyr	305	310	315	320
Leu	Glu	Asp	Val	Pro	Lys	His	Phe	Lys	Trp	Gln	Ser	Leu	Ser	Ile	Ile	325	330	335	
Arg	Cys	Gln	Leu	Lys	Gln	Phe	Pro	Thr	Leu	Asp	Leu	Pro	Phe	Leu	Lys	340	345	350	

Ser Leu Thr Leu Thr Met Asn Lys Gly Ser Ile Ser Phe Lys Lys Val
 355 360 365
 Ala Leu Pro Ser Leu Ser Tyr Leu Asp Leu Ser Arg Asn Ala Leu Ser
 370 375 380
 Phe Ser Gly Cys Cys Ser Tyr Ser Asp Leu Gly Thr Asn Ser Leu Arg
 385 390 395 400
 His Leu Asp Leu Ser Phe Asn Gly Ala Ile Ile Met Ser Ala Asn Phe
 405 410 415
 Met Gly Leu Glu Glu Leu Gln His Leu Asp Phe Gln His Ser Thr Leu
 420 425 430
 Lys Arg Val Thr Glu Phe Ser Ala Phe Leu Ser Leu Glu Lys Leu Leu
 435 440 445
 Tyr Leu Asp Ile Ser Tyr Thr Asn Thr Lys Ile Asp Phe Asp Gly Ile
 450 455 460
 Phe Leu Gly Leu Thr Ser Leu Asn Thr Leu Lys Met Ala Gly Asn Ser
 465 470 475 480
 Phe Lys Asp Asn Thr Leu Ser Asn Val Phe Ala Asn Thr Thr Asn Leu
 485 490 495
 Thr Phe Leu Asp Leu Ser Lys Cys Gln Leu Glu Gln Ile Ser Trp Gly
 500 505 510
 Val Phe Asp Thr Leu His Arg Leu Gln Leu Leu Asn Met Ser His Asn
 515 520 525
 Asn Leu Leu Phe Leu Asp Ser Ser His Tyr Asn Gln Leu Tyr Ser Leu
 530 535 540
 Ser Thr Leu Asp Cys Ser Phe Asn Arg Ile Glu Thr Ser Lys Gly Ile
 545 550 555 560
 Leu Gln His Phe Pro Lys Ser Leu Ala Phe Phe Asn Leu Thr Asn Asn
 565 570 575
 Ser Val Ala Cys Ile Cys Glu His Gln Lys Phe Leu Gln Trp Val Lys
 580 585 590
 Glu Gln Lys Gln Phe Leu Val Asn Val Glu Gln Met Thr Cys Ala Thr
 595 600 605
 Pro Val Glu Met Asn Thr Ser Leu Val Leu Asp Phe Asn Asn Ser Thr
 610 615 620
 Cys Tyr Met Tyr Lys Thr Ile Ile Ser Val Ser Val Val Ser Val Ile
 625 630 635 640
 Val Val Ser Thr Val Ala Phe Leu Ile Tyr His Phe Tyr Phe His Leu

645

650

655

Ile Leu Ile Ala Gly Cys Lys Lys Tyr Ser Arg Gly Glu Ser Ile Tyr
660 665 670

Asp Ala Phe Val Ile Tyr Ser Ser Gln Asn Glu Asp Trp Val Arg Asn
675 680 685

Glu Leu Val Lys Asn Leu Glu Glu Gly Val Pro Arg Phe His Leu Cys
690 695 700

Leu His Tyr Arg Asp Phe Ile His Gly Val Ala Ile Ala Ala Asn Ile
705 710 715 720

Ile Gln Glu Gly Phe His Lys Ser Arg Lys Val Ile Val Val Val Ser
725 730 735

Arg His Phe Ile Gln Ser Arg Trp Cys Ile Phe Glu Tyr Glu Ile Ala
740 745 750

Gln Thr Trp Gln Phe Leu Ser Ser Arg Ser Gly Ile Ile Phe Ile Val
755 760 765

Leu Glu Lys Val Glu Lys Ser Leu Leu Arg Gln Gln Val Glu Leu Tyr
770 775 780

Arg Leu Leu Ser Arg Asn Thr Tyr Leu Glu Trp Glu Asp Asn Pro Leu
785 790 795 800

Gly Arg His Ile Phe Trp Arg Arg Leu Lys Asn Ala Leu Leu Asp Gly
805 810 815

Lys Ala Ser Asn Pro Glu Gln Thr Ala Glu Glu Glu Gln Glu Thr Ala
820 825 830

Thr Trp Thr
835